



# Main Street Conceptual Plan

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TABLE OF CONTENTS

Chapter One: Introduction

1.1 Project Framework .....5

1.2 Project Background.....5

1.3 Project Background, Community Involvement .....5

1.4 Project Study Area Overview .....5

    1.4.1 Main Street Project Limits .....6

1.5 Main Street Planning Context .....6

    1.5.1 Freight and Goods Management.....6

    1.5.2 Complete Streets Legislation .....6

    1.5.3 Complete Streets Increase Safety.....6

    1.5.4 Chula Vista Complete Streets Context .....7

    1.5.5 Complete Streets for Cyclists and Pedestrians.....7

    1.5.6 Chula Vista Economic Context.....7

    1.5.7 Complete Streets: Reduction in Greenhouse Gas Emissions .....7

Chapter Two: Existing Conditions

2.1 Roadway Conditions .....9

    2.1.1 Roadway Right-of-Way Widths Matrix.....9

    2.1.2 Lanes.....9

2.2 Street Edge Form ..... 10

    2.2.1 Street Trees ..... 10

    2.2.2 Street Furnishings ..... 10

    2.2.3 Signage..... 10

2.3 Urban Form..... 10

    2.3.1 Building Massing..... 10

    2.3.2 General Building Heights ..... 10

    2.3.3 Building Setbacks ..... 10

    2.3.4 Empty Lots ..... 10

    2.3.5 Landmarks..... 11

    2.3.6 Perceived Districts..... 11

    2.3.7 General Plan Affecting the Study Area ..... 11

2.4 Building Character ..... 12

    2.4.1 Historic Periods..... 12

    2.4.2 Commercial Character..... 12

2.5 Existing Driving Conditions..... 12

2.6 Existing Walking Conditions ..... 12

    2.6.1 Walkway Facilities..... 13

2.7 Existing Cycling Conditions..... 13

    2.7.1 Bike Collisions..... 14

2.8 Existing Transit Rider Conditions..... 14

    2.8.1 Transit Shelters..... 14

Chapter Three: Analysis

3.1 WalkTime Zones ..... 15

3.2 Collisions and ADT ..... 16

3.3 Potential ROW Improvements ..... 18

3.4 Existing Conditions Analysis ..... 20

Chapter Four: Progress Meeting Development

4.1 Progress Meeting #1 ..... 23

4.2 Initial Design Themes..... 31

    4.2.1 Agriculture/Rancho Theme ..... 32

    4.2.2 River/Seaside Village Theme ..... 34

    4.2.3 Commerce Theme..... 36

4.3 Initial Roadway Concept..... 38

    4.3.1 Right-of-Way Improvements ..... 40

    4.3.2 Driving Focused Improvements..... 40

    4.3.3 Walking and Streetscape Focused Improvements ..... 40

    4.3.4 Bicycle Focused Improvements ..... 40

    4.3.5 Transit Focused Improvements ..... 40

4.4 Progress Meeting #2 ..... 41

4.5 Refined Design Concepts ..... 47

    4.5.1 Proposed Conceptual Design Districts ..... 47

    4.5.2 Proposed Circulation Concepts ..... 47

4.6 Progress Meeting #3 ..... 51

Chapter Five: Final Concepts

5.1 Roadway Option “A” - Round-a-bouts..... 58

    5.1.1 84’ ROW..... 63

    5.1.2 90’ ROW..... 64

    5.1.3 95’ ROW..... 65

    5.1.4 97’ ROW..... 66

    5.1.5 100’ ROW..... 67

    5.1.6 104’ ROW..... 68

    5.1.7 Proposed Roundabout ..... 69

5.2 Roadway Option “B”- Two Lanes Each Way ..... 70

    5.2.1 88’ ROW..... 75

    5.2.2 96’ ROW..... 76

5.3 Sea Garden District..... 77

5.4 Agriculture/Rancho District ..... 78

5.5 River District ..... 79



Figures

1.1 Main Street Project Area .....5

2.1 Roadway Right-of-Way Widths Matrix .....9

2.2 Traffic Turning Movement Counts Example ..... 13

2.3 Existing Bus Stop Facilities ..... 14

2.4 Existing Transit Service Routes ..... 14

3.1 Walk Time Analysis ..... 15

3.2 Collisions & ADT's ..... 16

3.3 Potential ROW Improvements ..... 18

3.4 Existing Conditions Analysis ..... 20

4.1 Agriculture/Rancho Theme ..... 32

4.2 River/Seaside Village Theme ..... 34

4.3 Commerce Theme..... 36

4.4 Initial Roadway Concept..... 38

4.5 MUTCD Signage ..... 40

4.6 Proposed Conceptual Design Districts ..... 47

4.7 Refined Circulation and Design Concept..... 48

4.8 Refined Concept Cross Sections and Perspectives ..... 50

5.1 Roadway Concept A - Roundabout Plan ..... 59

5.2 84' ROW Isometric & Section..... 63

5.3 90' ROW Isometric & Section..... 64

5.4 95' ROW Isometric & Section..... 65

5.5 97' ROW Isometric & Section..... 66

5.6 100' ROW Isometric & Section ..... 67

5.7 104' ROW Isometric & Section ..... 68

5.8 Roundabout Isometric ..... 69

5.9 Two-Way Left Turn Lane ..... 70

5.10 Roadway Concept B - Two Lanes Each Way ..... 71

5.1 88' ROW Isometric & Section..... 75

5.12 96' ROW Isometric & Section ..... 76

5.13 Sea Garden District Concept..... 77

5.14 Agriculture/Rancho District Concept ..... 78

5.15 River District Concept..... 79



Chapter One:  
INTRODUCTION

1.1 Project Framework

This chapter provides an overview of the background, purpose, vision and objectives of this plan.

The purpose of the document is to develop a “Complete Street” conceptual framework for Main Street, Chula Vista. A Complete Street is a balanced, connected, safe, and convenient transportation network designed to serve all users regardless of their mode (via walking, biking, and transit). Improve bike and pedestrian connections along Main Street will help to connect with nearby recreational activities and facilities, such as the Otay Valley Regional Park, schools, parks, South Library, and Otay Recreation Center. An additional goal of the project is to promote water conservation by incorporating green street design elements such as vegetated curb extensions, landscaped medians, and shade trees.

The purpose of the project is to create a vision and develop a conceptual design plan as the initial phase of the Main Street Streetscape design process. This plan has been accomplished by combining work efforts with the City’s current management staff, community Progress Meetings, and consultant development of the Conceptual Design Plan.

The following document establishes the vision, goals and objectives for Main Street and adjacent segments of north/south streets. It establishes a street theme and identity by creating focal points, streetscape design elements and the

potential use of signage and public art. The plan also creates a functional street plan that includes pedestrian connections, integration of land uses, and provisions for multi-modal access (via walking, biking, and transit) to nearby recreational activities and facilities.

1.2 Project Background

On April 6, 2012, SANDAG issued a call for projects from local jurisdictions in San Diego County wishing to apply for the Active Transportation (AT) funding for use on planning projects meeting specific transportation selection criteria. The City of Chula Vista was awarded the grant on March 28, 2013 from SANDAG and in turn, issued an RFP on June 20, 2013. The City of Chula Vista selected KTU+A for the development of the “Main Street Streetscape Master Plan” on July 11, 2013.

The project scope consists of:

- 1) the continuation of previous community participation efforts;
- 2) mobility objectives using complete street concepts;
- 3) promotion of a community identity through context sensitive design; and
- 4) demonstration of quality through the use of livability and sustainability principles.

1.3 Project Background

In 2007, the City began the “Southwest United in Action” community strengthening process to foster early dialogue between the City and the Southwest community. Through community events, surveys, and meetings, the Southwest United in Action process worked to clarify priorities of the community. This phase culminated in a “Southwest Leaders’ Conference” which was

held in the summer of 2009. As an outgrowth of the Southwest Leaders’ Conference and the urban design workshop, the City formed a group of interested individuals, knowledgeable of the area, with leadership abilities to participate in the Southwest Working Group (SWWG). The SWWG represents a cross-section of the southwest community, including members from community organizations (e.g. Crossroads II, Northwest Civic Association, and Walk San Diego), businesses and local developers, and residents.

Attendees at these formative meetings were provided information on a variety of subjects ranging from planning to municipal financing to leadership opportunities. In July 2009, an urban design workshop focused on Main Street was conducted. Participants listened to an informational presentation and took a walking tour along Main Street and the surrounding neighborhoods. They corroboratively worked to map out the future vision for the area. The results of this workshop are summarized in an informational booklet titled “Urban Design Workshop Summary.” The planning effort was stalled for funding reasons.

The funding from the SANDAG Active Transportation grant program, has allowed the City to continue this previous planning effort.

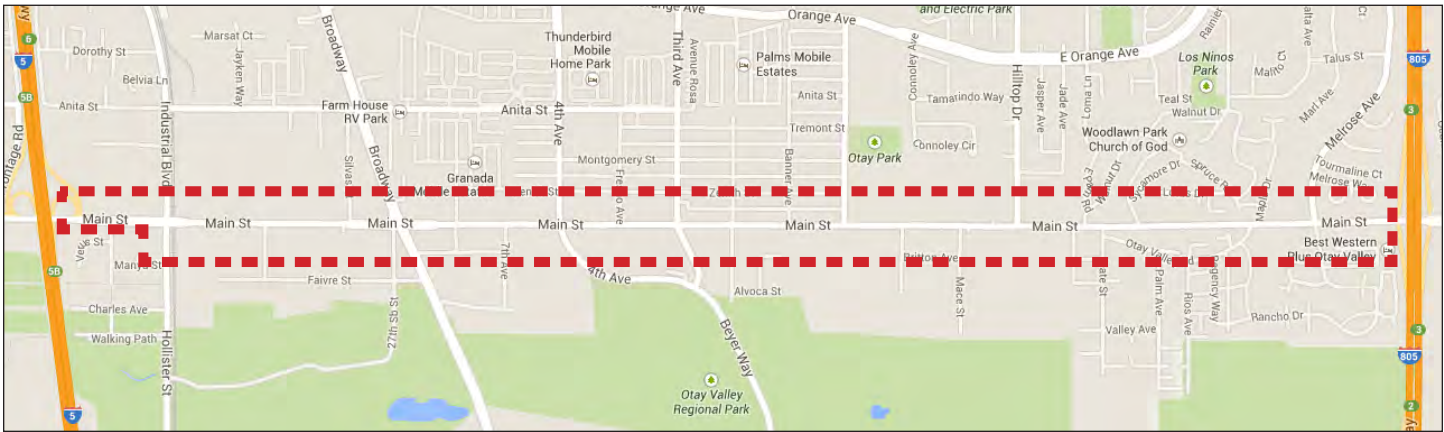
1.4 Project Study Area Overview

Chula Vista is located at the center of one of the richest cultural, economic and environmentally diverse zones in the United States. It is the second-largest City in San Diego County with a population of nearly 250,000. Chula Vista contains more than 50 square miles of coastal landscapes, canyons, rolling hills, mountains, and a variety of natural resources and quality infrastructure.

Chula Vista is growing at a fast pace, with major developments taking place in the Otay Valley near the U.S. Olympic Training Center and Otay Lake Reservoir. New homes have been built in the Otay Ranch, Lomas Verdes, Rancho Del Rey, Eastlake and Otay Mesa Areas.

Multiple Interstates and California State Routes serve the City. Interstate 5 begins to the south of the city and runs through its western edge. Interstate 5 connects Chula Vista to North County and beyond to Greater Los Angeles and Northern California. Interstate 805 serves as a bypass

Fig. 1.1: Main Street Project Area





to Interstate 5, linking to the latter interstate in Sorrento Valley. Route 905 runs from the Otay Mesa Port of Entry and is one of three auxiliary three-digit Interstates to meet an international border. State Route 95 connects to State Route 125, Interstate 805 and Interstate I-5. State Route 54 and State Route 125 serve as highways to East County cities via north and northeastern corridors.

### 1.4.1 Main Street Project Limits

The streetscape conceptual plan area is located in the southwest corner of the City of Chula Vista and extends along an approximately three-mile stretch of Main Street between Interstate 805 and Industrial Boulevard and connects north and south along neighboring through streets including Broadway, Fourth Avenue, Third Avenue and Albany Avenue.

The Main Street study area functions as a commercial-industrial service area and interfaces with the Otay Town residential neighborhoods north of Main Street and the Otay River Valley open space to the south. The district's area of focus is generally located between Industrial Boulevard on the west and Hilltop Drive on the east.



Main Street parallels the Otay River Valley from San Diego Bay all the way to the Otay Lakes. Eventually Main Street will extend easterly from Heritage Road, cross SR-125, and connect to Hunte Parkway at the intersection with Eastlake Parkway. For further information, refer to the City of Chula Vista Greenbelt Master Plan dated September 16, 2003.

### 1.5 Main Street Planning Context

The purpose of the project is to develop a streetscape master plan for a “complete street”, which is a balanced, connected, safe, and convenient transportation network designed to serve all users regardless of if they are driving cars or trucks, walking, bicycling, or taking transit. Another purpose of the plan is to improve access to nearby recreational activities and facilities, such as the Otay Valley Regional Park and Otay Recreation Center. The project needs to be designed to promote water conservation by incorporating green street design elements as well.

#### 1.5.1 Freight and Goods Management

Freight and goods movement are important elements of every circulation element roadway. This is especially true for Main Street. The Main



Street Master Plan, when completed, will need to be consistent with planning efforts happening at the State (DRAFT, Caltrans 2014 Freight Mobility Plan), and Regional (SANDAG's 2050 Goods Movement Strategy).

#### 1.5.2 Complete Streets Legislation

On September 30, 2008, Governor Arnold Schwarzenegger signed Assembly Bill 1358, the California Complete Streets Act. The act states:

*“In order to fulfill the commitment to reduce greenhouse gas emissions, make the most efficient use of urban land and transportation infrastructure, and improve public health by encouraging physical activity, transportation planners must find innovative ways to reduce vehicle miles traveled (VMT) and to shift from short trips in the automobile to biking, walking and use of public transit.”*

The act requires circulation and roadway planning efforts to provide for a balanced, multi-modal transportation network that meets the needs of all users of the streets, roads, and highways for safe and convenient travel in a manner that is suitable to the rural, suburban, or urban context of the general plan. The “users of streets, roads, and highways” means bicyclists, children, persons with disabilities, motorists, movers of commercial goods, pedestrians, users of public transportation, and seniors.

#### 1.5.3 Complete Streets Increase Safety

Complete streets create a safe environment for all users and reduce crashes through comprehensive safety improvements. A Federal Highway Administration review of the effectiveness of a wide variety of measures to improve pedestrian safety found

that simply painting crosswalks on wide high-speed roads does not reduce pedestrian crashes. But measures that design the street with pedestrians in mind – sidewalks, raised medians, better bus stop placement, traffic-calming measures, and treatments for disabled travelers – all improve pedestrian safety.

Roadway design and engineering approaches commonly found in complete streets, create long-lasting speed reduction and greater safety. Speed reduction has a dramatic impact on safety for all road users, reducing both the number and seriousness of crashes. Methods to increase safety include enlarging sidewalks, installing medians, and adding bike lanes. All road users – motorists, pedestrians, and bicyclists – benefit from slower speeds and better design.

Complete streets encourage safer driver and bicycling behavior. Sidewalk bicycle riding, especially against the flow of adjacent traffic, is more dangerous than riding in the road due to unexpected conflicts at driveways and intersections. A recent review of bicyclist safety studies found that the addition of well-designed bicycle-specific infrastructure tends to reduce injury and crash risk.





1.5.4 Chula Vista Complete Streets Context

The focus of the Main Street Streetscape Master Plan is to create a multi-modal and complete street by balancing the needs of pedestrians, bicyclists, vehicles, and public transportation, and the aesthetic improvement of public streets. Streetscape improvements will include sidewalks, lighting, landscaping, street furniture, bike facilities, traffic signals, streetlights, new roadway pavements and landscaped median islands. Bicycle facilities will provide critical linkages to the regional Bayshore Bikeway and Otay Valley Regional Park. Connections to residential neighborhoods will also occur along Broadway, Fourth Avenue, Third Avenue and Albany Street located to the north and south of Main Street. Community connections will be strengthened by identifying elements such as closing sidewalk gaps, adding pedestrian lighting, enhancing landscaping, defining crosswalks, and modifying signal timing to accommodate multiple users. These same north/south connections to the Otay Valley Regional Park, Otay Park and the Otay Recreation Center will be enhanced through new way-finding and improved pedestrian and bicycle access.



1.5.5 Complete Streets for Cyclists and Pedestrians

The project seeks to increase the safety for bicyclists and pedestrians thereby improving the quality of life for nearby residents, visitors and businesses. Use of the street can also be improved by upgrading the basic street surface, sidewalks, bikeways, and overall streetscape. The 2010 City of Chula Vista Pedestrian Master Plan and 2011 Bikeway Master Plan, provide data regarding bicycle collisions and pedestrian crashes that have occurred along Main Street and connecting streets such as Fourth and Third Avenues. Based on these adopted plans, this project recommends areas that need replacement of inadequate or non-existent public improvements. The plan calls for upgraded or new sidewalks within the existing public right-of-way that will improve accessibility and mobility for pedestrians and bicyclists alike. In addition, the 2010 Pedestrian Master Plan identified pedestrian and bicycle safety needs in the vicinity of two elementary schools (Montgomery and Otay) within the project boundary. The deficiencies were based on a “Kids Walk and Bike to School” audit. The project will incorporate recommendations from that study to improve safety for school children.



1.5.6 Chula Vista Economic Context

The project seeks to act as a catalyst for economic development and redevelopment by designing capital improvements that will provide an incentive for private investments, thereby contributing to the removal of blight. The project would increase residential amenities and provide needed public Active Transportation Grant Program - Non-Capital Grants City of Chula Vista Main Street Streetscape Master Plan improvements for the area, which in turn, increases the desire for residents to live, shop and play and businesses to establish and expand operations in the area. The project seeks to improve accessibility to goods and services for residents within the residential neighborhood north and south of Main Street, the Main Street business district, adjacent Montgomery and Otay Elementary schools and enhance way-finding to recreation resources including the Otay Valley Regional Park and Otay Recreation Center.



1.5.7 Complete Streets: Reduction in Greenhouse Gas Emissions

The project will promote energy efficiency by designing and re-constructing the street to provide alternative travel choices, thereby reducing reliance on the automobile, and decreasing fuel consumption. The project would incorporate greenhouse gas reduction measures by planning improvements for bicycles and walking, enhancing access to transit, and reducing the amount of asphalt and impervious surfaces along the three mile long transportation corridor. The project would promote energy efficiency by incorporating green street design elements such as cool paving, vegetated curb extensions, sidewalk planters, landscaped medians and shade trees (pursuant to the City’s new shade tree policy). Landscaping is a critical component to help shade the area to lower summer time heats, since plants contribute to cooling the air through the evaporation of water from their leaves. Lower temperature and shade will result in a more comfortable bicycling and pedestrian environment making this mode a more preferred travel choice.







Chapter Two:  
EXISTING CONDITIONS

The Main Street study area is described by the City’s General Plan as a major industrial and commercial corridor. These corridors provide direct connections to other commerce and urban centers such as the Bayfront, Autopark and Otay Ranch. The general plan notes that some properties are underutilized and deteriorated, representing a lack of private investment in the area. The physical characteristics of the Main Street study is one of a vibrant and diverse area of activity and commerce, typified by both large and small businesses. These conditions were confirmed through field walks, data base investigation, and are shown on existing conditions mapping on the following pages.

2.1 Roadway Conditions

Much of the area contains partial asphalt sidewalks with no curb or gutter. In many cases gutters or sidewalks are entirely missing. Other areas along the street are characterized as having good quality concrete sidewalks. In still other areas, sidewalks are in average condition and demonstrate minor deterioration. In general, achieving the goals of a complete street will entail providing a comprehensive system of pedestrian connections that are supported by a usable and durable walkway system. Main Street has a current speed of 40 mph and an average daily traffic volume range between 20,000 - 30,000 average daily traffic (ADT) traffic volumes. The City of Chula Vista Pedestrian Master Plan (2010) ranks Main Street as a high to very high priority for attention because of the missing sidewalks, curb ramps, gutters, parkways, street furniture, land-

scaping, lighting and crosswalks. Additionally, the General Plan also identifies over 20 crashes involving pedestrians between 2002 and 2007 along this segment of Main Street. One of the findings of a complete streets is that by providing infrastructure for non-vehicular trips, it will help in reducing overall ADT as well as reducing vehicular speeds.

**2.1.1 Roadway Right-of-Way Widths Matrix**  
This matrix refers to the largest to smallest existing and proposed right of ways at each intersection along the 3-mile stretch of Main Street. The widths are based upon feet and are measured from back of existing and/or proposed walkways. Multiple options were developed for the concept plans for Main Street. Each option dealt with different levels of right of way (ROW) use.

This plan proposes two options for the circulation element that directly affect the ROW discussion. Option “A” shows a traffic calming solutions including Round-a-bouts, lane diets (the reduction of lane widths), protected pedestrian crossings and striped bicycle facilities. This option also attempts to smooth out the exiting ROWs by removing the existing jagged edge effect, while protecting structures along the 3-mile project boundary.

Option “B” shows a similar traffic calming solutions to Option “A”. However, Option “B” shows a two-lane solution starting 300’ east on the east bound lane (EB) from Broadway and ending 390’ after Albany Ave. on the west bound lane (WB). Refer to Figure 2.1 on the following page.

Intersection at Main St.	Mapped R.O.W. in feet	Option "A"	Option "B"
Broadway W	102	104	104
Industrial E	104	104	104
Industrial W	102	104	104
Jacqua E	101	104	104
Jacqua W	101	104	104
Silvas St. E	102	104	104
Silvas St. W	102	104	104
Maple Dr. E	84	100	100
Maple Dr. W	84	100	100
Melrose Ave. W	99	100	100
Otay Valley Rd. E	84	100	100
Otay Valley Rd. W	84	100	100
Albany Ave. E	103	97	97
Date St. W	85	97	97
Hilltop E	102	97	97
Hilltop W	102	97	97
Mace St. E	104	97	97
Mace St. W	91	97	97
Reed Ct. E	91	97	97
Reed Ct. W	99	97	97
7th St. W	102	95	96
Broadway E	102	95	100
Fresno E	91	93	88 (100 bus stop)
Albany Ave. W	102	90	90
Banner Av. E	91	90	90
Banner Av. W	91	90	88
Date St. E	84	90	90
Del Monte Ave. E	90	90	88
Fourth Ave. E	91	90	88
Fourth Ave. W	80	90	96
Fresno W	91	90	88
Sycamore Dr. E	84	90	90
Sycamore Dr. W	79	90	90
Third Ave. W	91	90	88
Del Monte Ave. W	80	84	88
Third Ave. E	91	84	88
7th St. E (House)	80	82	82
Mapped R.O.W. Average	93	95	96

Fig. 2.1: Roadway Right-of-Way Widths Matrix



## 2.1.2 Lanes

The three-mile long, four-lane major road has a patchwork of improvements such as: various levels of concrete curb and gutters, concrete sidewalks, raised medians with asphalt fill or integral color stamped concrete. Different sections also have varying degrees of planting, bus stop improvements, parallel parking zones and non-parking zones. Most of Main Street is four lanes (two in each direction) with turn pockets at intersections and mid-street left turn lanes in certain areas. These mid-street left turn lanes are described as a Two-Way Left Turn Lane in the center of the roadway (TWLTL).

## 2.2 Street Edge Form

Roadway lanes are a part of the street that is dedicated to moving vehicles (trucks, buses, cars and bikes). However, the edge of the roadway beyond the curb, supports important functional aspects such as: access to driveways, entries to parking, locations for signage, fencing, plantings, and dry or wet utilities.

### 2.2.1 Street Trees

One function of a street is to provide an urban forest edge made up of street trees that helps to provide an appropriate scale for a street and to provide a safer and more comfortable walking environment for pedestrians.

There is no specific City document for formal street tree planting plans for Main Street. Street tree planting is sporadic and often has large gaps (frequently entire blocks) between regularly spaced trees. The scale of tree plantings range from older mature trees to medium and small trees. Additionally, there are no street medians in which trees occur.

Trees that are evident on Main Street include: Arbutus, Cypress, Eucalyptus, Ficus, Liquidambar, Melaleuca, multiple Palm types, Pine, Podocarpus, and Sycamore. The Eucalyptus were from an earlier agricultural period. The Sycamore trees express the proximity of low-lying areas and the nearby Otay River. The sparse tree spacing and the random quality of the planting contribute to the overall automobile-centric impression of the area. The small number of trees do little to provide shade or other potentially sustainable qualities that promote a more usable street for pedestrians.

### 2.2.2 Street Furnishings

There are very limited street furnishings such as benches and trash receptacles found along Main Street. Existing street furnishings are primarily found at transit stops, and are limited to occasional benches, trash cans, and bus shelters. These items are limited throughout the length of the corridor.

### 2.2.3 Signage

Signage is primarily limited to regulatory signs and directional signs, particularly those to the east and west of the study area that provide direction to major freeways. Signage is dominated by commercial signs of private businesses. There are no designed or organized signage program that express the character of the area.

## 2.3 Urban Form

The urban form consists of the relationship of building masses interfacing the roadway and streetscape edges. In general, the district is characterized by low-rise post WWII commercial buildings with some intermittent areas of single-story residential homes. Main Street itself is a well-traveled light industrial corridor carrying vehicles of

all types that use and service the businesses along the corridor.

### 2.3.1 Building Massing

The eastern end of the district is dominated by single story residential buildings set back from Main Street and do little to form an urban edge condition. Moving towards the west, some larger public facilities such as MTS take up an entire block, but do not provide a distinct edge since they are dominated by needs for vehicular movement. Moving further west, commercial businesses, often related to automotive services dominate the street. These light industrial businesses are typically single story and also have larger scale outdoor space needs that perforate the street edge. Light or limited Industrial uses extend within previously developed areas south of Main Street to the edge of the Otay River Valley open space. Some empty lots also contribute to the inconsistency of the building massing. In addition, a distinct pocket of residential buildings dominate the central area of the project, offering a series of driveways and single story homes that are set back from the right-of-way. It isn't until businesses reach the proximity of the I-5 that commercial structures achieve a critical mass that forms a recognizable, consistent street wall of buildings forming a distinct edge.



### 2.3.2 General Building Heights

There is great variation along the length of Main Street in terms of building size. The east end is dominated by residential buildings with most structures typically being single story. New development has created a few two and three story residential units and commercial buildings located mid-way in the corridor and also to the west. Different purpose buildings appear to be above 20' in height. A number of older homes are two story with just a few at three story, which are typically "Victorian" period estates.

### 2.3.3 Building Setbacks

Building setbacks vary significantly along the corridor. The setbacks range from 7' to 35' from face of curb to face of structure. The variation in setbacks conveys an image that is slightly less urban than the tightly defined infill found in the most traditional, pedestrian-centric downtown areas. The types of development too, such as storage facilities or businesses oriented towards a regular flow of tractor trailers, take up large amounts of street frontage. This dominance of curb cuts and varying building setbacks makes the edge of the street less regular.





2.3.4 Empty Lots

Of the several hundred parcels found in the study area, there are few underutilized or empty lots. Some of these lots contained buildings that have been demolished, while others contain land uses that do not require structures. In some cases, a structure is on one parcel with other uses exist on the next parcel. For the most part, Main Street is an active, well-utilized light industrial area where businesses are active and making full use of their land resources. Empty lots along Main Street represent a future opportunity for infill development.

2.3.5 Landmarks

Building landmarks, landmarks employing monumentation or commemoration, or historic signage do not occur along the corridor. The most significant visual landmark is the 5 acre strawberry field, located at the southwest corner of Fourth Avenue. This field represents a vital part of Chula Vista’s agricultural history. There are currently efforts underway, led by the South Bay Historical Society, to preserve 5 acres of the field.

2.3.6 Perceived Districts

A district is a planning term for an area of land that has consistent character, urban form, architectural styles, scale and other building elements.

A node is an area that helps to tie together connecting points between land use and urban forms. These connecting points of urban form and activities are referred to as the nodes.

The intent of this study is to identify and enhance districts and nodes that may already exist. The creation of the district will be accomplished by building on the inherent elements of the area, and employing a vocabulary of urban forms including the use of signage, monumentation, planting, pavement, street geometry, and site furnishings to enhance the perceived identity of the districts.

2.3.7 General Plan Affecting the Study Area

The City’s General Plan provides one notion of the Main Street District, describing Main Street/ Auto Park Way as a primary gateway to Chula Vista. This gateway provides access to the Auto Park and commercial recreation venues within the Otay Valley, including an amphitheater and water park.

The 2005 General Plan Update, describes the Southwest Area of Main Street as: *“the focus of limited uses within Western Chula Vista. The appearance of this heavily traveled thor-*

*oughfare has improved over the years due to conformance with design standards that encourage attractive buildings and street frontages, and that provide protection of adjacent residential area. Light or limited industrial uses extend within previously disturbed development areas south of Main Street to the edge of the Otay River Valley open space. Mining activities within and adjacent to open space areas have ceased. With the implementation of mining reclamation plans for these areas, there is a balance between restoration of habitat for sensitive biological species, new employment, and other recreation uses.*

The stated objective is to: *“provide for and enhance a strong business district along Main Street that can be balanced between meeting the community’s economic needs and establishing a strong open space connection with the nearby neighborhoods.”*

Policies include the following:  
*LUT 45.1 Coordinate implementation of mining reclamation plans with the need to program land for job-creating and recreation uses along the Otay River Valley.*

*LUT 45.2 Explore opportunities to restore sensitive*

*habitat areas between Broadway and Beyer Way where mining activities currently exist, through state mandated mining reclamation plans.*

*LUT 45.3 Explore opportunities to provide sensitively designed active recreation parks adjacent to the Otay River Valley to meet local, as well as regional, park needs.*

*LUT 45.4 Continue ongoing code enforcement efforts to ensure acceptable property maintenance standards.*

*LUT 45.5 The City shall prepare, or cause to have prepared, a specific plan or plans, for the Main Street District area that address an increase in depth of Limited Industrial designated land uses on the north side of Main Street back to Zenith Street; establishes design and landscape guidelines and zoning-level standards; and addresses the interface of the Otay Valley Regional Park with land uses on or near Main Street.*

As a requirement of the General Plan, the City will prepare an implementation program to define logical planning units within the overall Main Street District. The implementation plan will assure establishment of plans and regulations





for the overall District and the identified planning units. The Implementation Program will also include interim provisions for the consideration of projects within this area prior to completion and adoption of the applicable plan/regulations.

The remainder of the Main Street corridor was inventoried in an effort to identify specific themes based on existing conditions. As a part of the investigation the design team walked Main Street to become familiar with the detail and feel of the entire corridor. The on-site walks, along with community input, helped the team become familiar with the unique character of the area, and ultimately assisted the team in identifying and establishing sub-districts for Main Street. These subdistricts are described in detail in Chapter 5.

### 2.4 Building Character

The following structures have been designated by the City of Chula Vista as official historic sites. Significant historic buildings on Main Street include: No. 68 - 3487 Main Street, “Lorenzo Anderson House,” a Victorian Orchard House (*see photo below*); No. 75 – 3148 Main Street, Otay Town Club House. The strawberry fields meet the State criteria for historical significance but they have not been designated.



On the whole, the majority of buildings are Post WWII and do not exhibit significant historical architectural interest. Many buildings along Main Street are functional in nature, and their utility is expressed in the products or services they offer. Commercial signage is often integrated with buildings, and act as markers for customers in this vehicular oriented corridor. The colors tend to mirror a typical neutral palette, and architectural forms are rectangular and uncomplicated.

#### 2.4.1 Historic Periods

In 1888, the Sweetwater Dam was completed, bringing water to Chula Vista residents and their farming lands. As a result, the citrus industry exploded and Chula Vista eventually became the largest lemon-growing center in the world for a period of time. This influence is still seen today - most of the properties located on the north side of Main Street between Fourth Avenue and Albany Street are narrow lots, which are part of the original Otay Town Subdivision, dating back to the 1887 land track.

During World War II, a significant amount of defense industry housing was built in the area to house workers in the Rohr Industry plants, con-



nected with the giant Consolidated Aviation aircraft factories in San Diego, located near the airport. Some of this workforce housing was in the form of mobile home parks and tent cities. Many of the adjacent mobile home parks have their historical roots as part of this defense housing.

The Post WWII era largely replaced the agricultural character surrounding Main Street, and nearby mining activities contributed to the level of industrialization of the area. Today the properties on the north side of Main interface very closely with the residential properties on the south side of Zenith Street. Several of the industrial properties have already encroached and overtaken some of the residential properties, particularly at the west end of Zenith Street. However, many other residential properties, predominantly single-family units, located east of Fresno Street are stable and are kept in very good condition. Several storage facilities and outdoor storage businesses exist in the area. The area along Main Street between Fourth and Albany Street contain several used car lots, which are considered non-conforming uses.

#### 2.4.2 Commercial Character

The Main Street District functions as a commercial



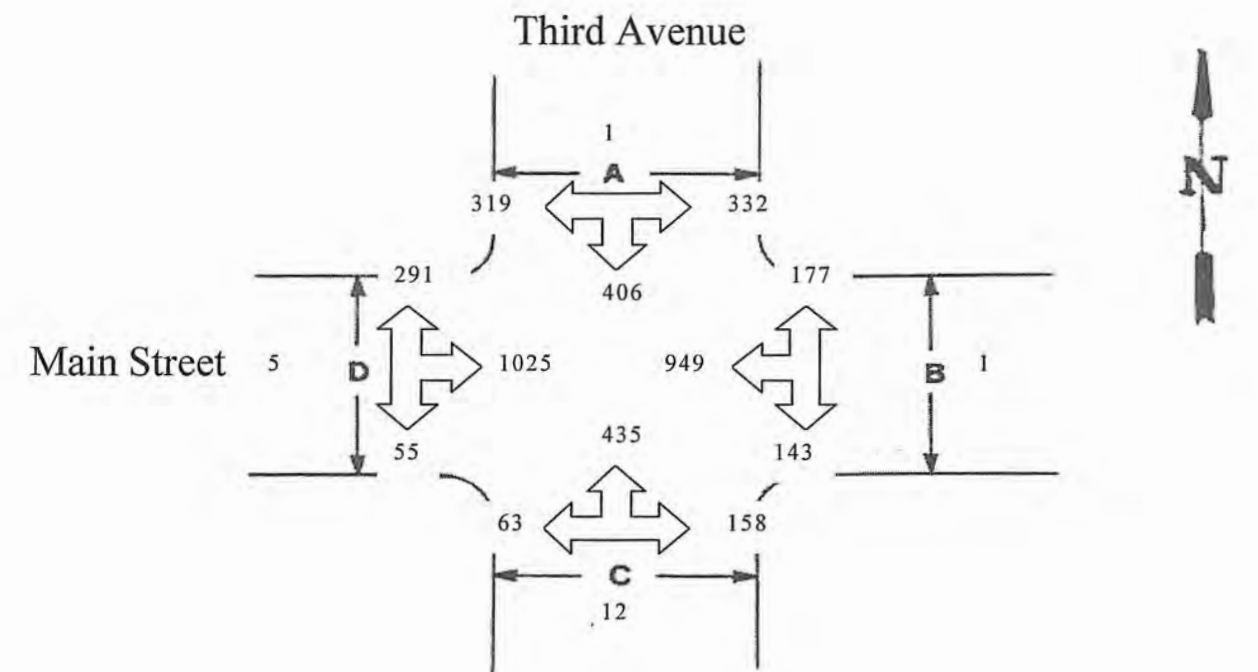
industrial area and interfaces with other residential neighborhoods north and south of Main Street and with the Otay River Valley open space to the south. While there are relatively large commercial properties on the north side of Main Street west of Broadway, remaining land uses on the north and south sides of Main Street consist of light industrial uses. Several storage facilities and businesses consisting of outdoor storage areas, exist in the area. The General Plan vision for the Main Street District is the continued development of the area with industrial uses, remaining as the primarily industrial area of Southwest Chula Vista.

### 2.5 Existing Driving Conditions

The general conditions of the roadway are adequate for drivers, though the change in width is sometimes abrupt and the sporadic on-street parking creates an always changing edge environment. To some degree, changing edge conditions actually play a positive role by aiding in traffic calming. Overall, the very wide nature of the roadway, as well as the limited on-street parking and vacant land uses, combine to create more of a speedway thoroughfare rather than a traffic calmed destination street that supports multiple-modes and adjacent businesses.







Peak Hour 11:30-1:30 1045 Cars  
Third Avenue

Intervals	NB-RT	NB-T	NB-LT	S LEG-BIKE	SB-RT	SB-T	SB-LT	N LEG-BIKE
11:30-11:45	35	95	14	1	37	45	30	0
11:45-12:00	21	70	7	3	40	45	36	0
12:00-12:15	11	32	4	2	44	43	46	0
12:15-12:30	24	61	4	2	41	46	55	0
12:30-12:45	21	53	11	1	29	51	43	0
12:45-1:00	15	44	12	1	44	59	41	0
1:00-1:15	17	44	8	2	34	58	52	1
1:15-1:30	14	36	3	0	50	59	29	0
Total	158	435	63	12	319	406	332	1

Main Street

Intervals	EB-RT	EB-T	EB-LT	W LEG-BIKE	WB-RT	WB-T	WB-LT	E LEG-BIKE
11:30-11:45	6	91	44	0	22	87	12	1
11:45-12:00	10	119	27	1	24	112	19	0
12:00-12:15	13	132	36	2	37	141	24	0
12:15-12:30	5	119	42	0	21	114	15	0
12:30-12:45	8	155	38	0	20	141	18	0
12:45-1:00	7	139	37	0	15	117	13	0
1:00-1:15	2	128	38	2	19	116	22	0
1:15-1:30	4	142	29	0	19	121	20	0
Total	55	1025	291	5	177	949	143	1

Fig. 2.2: Traffic Turning Movement Counts Example

Some on-street parking exists, but in areas where the ROW is less than 80' and where on-street parking is prohibited. Further west to east from I-5, the blocks are typically designed with driveways fronting onto the street with building placement set back from the street. Based on fieldwork and as seen in the photos on the previous pages, congestion is rarely a problem along roadway segments of Main Street. Congestion does sometimes occur at major intersections such as Main Street and Broadway for example. (See Fig. 2.2 this page.)

2.6 Existing Walking Conditions

The project is located adjacent to the Otoy Valley Regional Park, but lacks way-finding and easily accessible connections to the park for nearby residents. In general, the walking conditions and pedestrian facilities are inadequate and the lack of safe pedestrian crossings is problematic to most all pedestrians that may venture onto or near Main Street.

2.6.1 Walkway Facilities

Walking along Main Street is generally problematic depending on which segment you are walking. Utility poles, boxes, signs and mailboxes obstruct sidewalks. The roadway width and lack of safe pedestrian crossings makes the street a divider street, limiting walkers to one side of the street or the other. A significant portion of Main Street is lacking in sidewalks or contains a variety of poor walkway conditions. More than 30% or 9,037 ft. of the entire alignment does not contain a sidewalk. Many locations have on-street parking, but most are empty and many of the segments do not allow parking because of the narrow ROW. Street trees are sporadic and mostly missing. Some of the pedestrian crossings are high risk since they

require all four lanes of vehicular travel to stop and yield, which is unlikely. This type of crossing is considered to be a multi-lane/multi-threat condition where one vehicle may stop, but it might block the view of the pedestrian, so that an overtaking vehicle may not see the pedestrian crossing.

A school area assessment, completed as part of the City of Chula Vista 2010 Pedestrian Master Plan, identified deficiencies in the routes to school for adjacent neighborhood children who attend the two nearby elementary schools (Otoy and Montgomery Elementary).

Commercial pockets along Main Street currently have limited accessibility. Through previous walkability audits, barriers were identified that caused inconvenient or potentially hazardous routes that have missing sidewalks, heavy traffic and limited pedestrian amenities and connections.

All of these factors combine to make Main Street a pedestrian unfriendly location. However, with changes in future land use, an increase in the number of safe crossing points, and the addition of street trees as a buffer, and the additional offset provided by the proposed bike lanes, the area could be made more pedestrian friendly.

2.7 Existing Cycling Conditions

Even though the City's topography is quite different between the east and west, bicycle facilities tend to occur at the West End and East End of Main street (The Bay Shore Bikeway and beyond the Eastside of I-805 intersection, a dedicated bike lane emerges.) Main Street only has a California MUTCD sign (D11-1) showing a "Bike Route". The bike bicycle signage and the East and West facilities are generally accessible to the



majority of residents who choose to ride bicycles. The relatively flat terrain of Main Street allows numerous access points to a four lane majors or any given two lane collector street.

Cycling along Main Street can be challenging due to the narrow outer lanes, on street parking, and the general high speed of the street along most of the study area. Bike lanes do not currently exist. When parking is not present in legal on-street parking zones, adequate bike-to-vehicle buffer width exists in certain areas (generally considered to be a 4’ area next to a 12’ lane, which allows a car to pass with 3’ of clearance if they move to the left side of the lane). In other portions of the project area, the bike-to-vehicle buffer is sub-standard, causing cyclists to take the full vehicular travel lane. Of the cyclists seen, many choose to ride on the sidewalk instead of the road, or tended to remain in close proximity to the curb line and stay close to parked cars within the door zone – which is a hazardous riding movement for cyclists.

2.7.1 Bike Collisions

The City of Chula Vista’s Bikeway Master Plan (2011) identifies Main Street as a major bicycle link (Class 2 Facility) to the regional Bay-shore Bikeway, but improvements have not been planned for this heavily traveled route. The Bike-way Master Plan also noted five bicycle collisions between 2005 and 2009 along this segment of Main Street.

2.8 Existing Transit Rider Conditions

Route 701 runs Monday through Friday serving the H Street Trolley Station and the Palomar Trolley Station via H Street, Fourth Street, F Street, First Avenue, Hilltop Drive, Main Street, and Anita Street. SANDAG’s 2050 Regional

Transportation Plan identifies “rapid bus” service from Eastlake/EUC to the Palomar Trolley via the Main Street corridor. Bus stop locations, bus shelters, and future rapid bus service should be assessed to ensure they provide safe and convenient locations for the neighborhoods they serve. (Refer to Fig. 2.4 on this page.)

In April 2012, MTS and SANDAG initiated the site development portion of the expansion of 3650A Main Street in the City of Chula Vista, a 10.6 acre site. The project included electrical upgrades, water lines for future buildings, and other storm water treatments onsite to ensure water quality compliance. Landscaping was also replaced with water efficient plants, trees, and a new irrigation system. The site now can accommodate up to 240 transit buses daily and more than 100 off-street transit user parking spaces.

Bus transit availability on Main Street is strong and transit stops occur regularly along Main Street. Transit stop amenities are limited in regards to shelters, seating, and trash containers.

2.8.1 Transit Shelters

Main Street has eleven bus stops, five east bound (EB) and six west bound (WB). Of the eleven bus stops, only two stops have shelters. Shelter #1: EB at Main Street & Albany, Shelter #2: WB at 3554 Main Street. The other nine bus stops do not have shelters for transit user protection from the elements. Even for those that do have shelters, no trash receptacles or seating exist. All bus stops should have consistent elements, such as shelters with lighting, trash receptacles and seating. (Refer to Fig. 2.3 on this page.)

Bus Stop Location	Lane	Bus Number	Shelter	Trash Can	Seating
Main St. & Jacqua St.	EB	932	no	yes	no
Main St. & Jacqua St.	WB	932	no	yes	no
Main St. & Silvas St.	WB	932	no	yes	no
Main St. & 3121 Main St.	EB	701	no	yes	yes
Main St. & Third Ave.	WB	701	no	yes	yes
Main St. & Del Monte Ave.	EB	701	no	yes	yes
Main St. & Albany Ave.	EB	701	yes	no	yes
Main St. & 3554 Main St.	WB	701	yes	yes	yes
Main St. & 3650 Main St.	WB	701	no	yes	yes
Main St. & Mace St.	EB	701	no	no	no
Main St. & Hilltop Dr.	WB	701	no	yes	no

Fig. 2.3: Existing Bus Stop Facilities

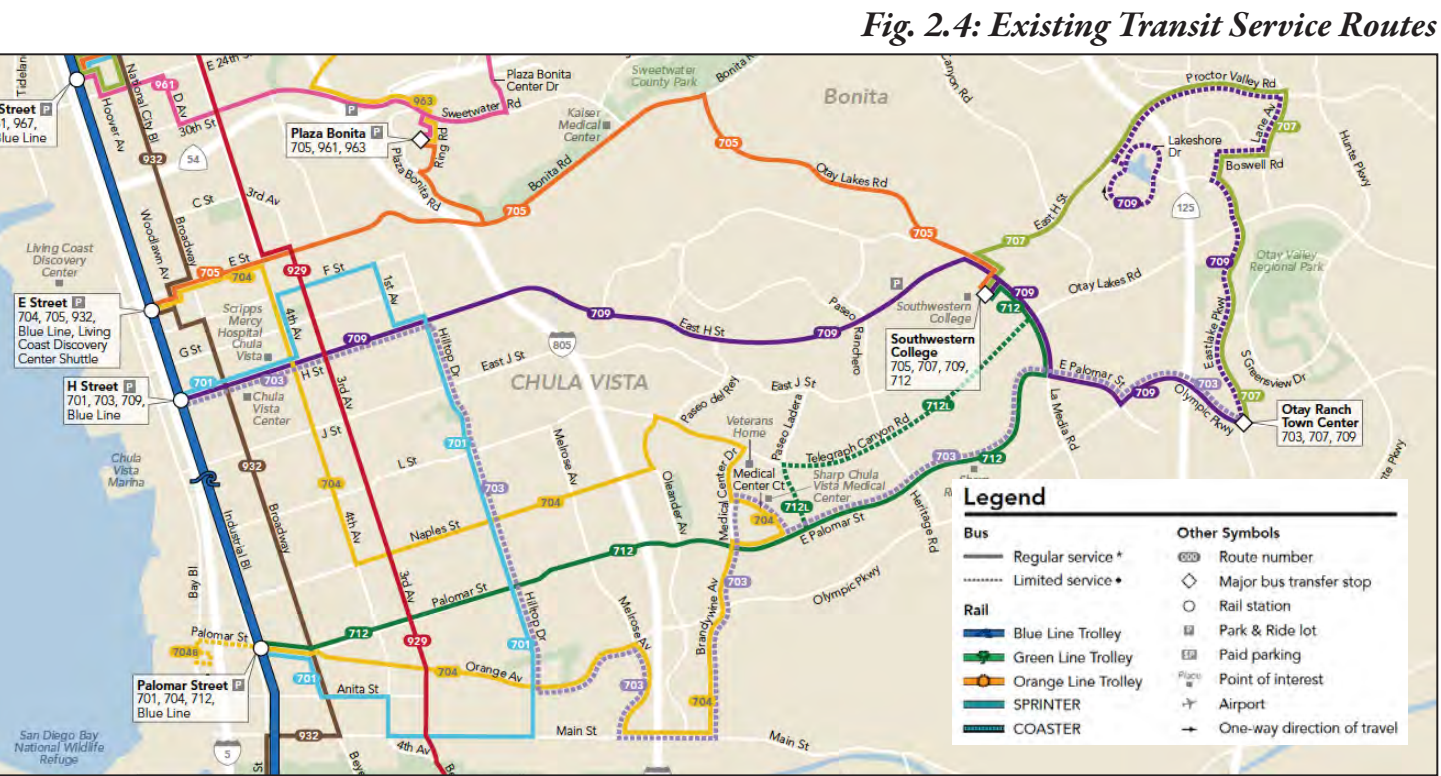


Fig. 2.4: Existing Transit Service Routes



# Chapter Three: ANALYSIS

## 3.1 Walk Time Zones

Walk time analysis is a Geographic Information Systems (GIS) based method to determine the walking distance from a specific point. For this study, walksheds using a 15-minute walking distance were developed to capture the number of attractors near Main Street. The analysis consisted of using a 3 mile-per-hour walk speed\* for pedestrians using the existing street network. Using the street network with real time walking routes is far more accurate than the traditional method of concentric circles of 1/4 to 1/2 mile around destination points. The walk time network analysis takes into account the facilities pedestrians can actually use (or will use with future walkways) and the direction that streets send walkers to their destinations. Concentric buffers do not take into account the street network and barriers such as dead-ends or out of direction routes.

A 15-minute walkshed was developed for each attractor, then merged to create a composite walkshed, as seen on Fig. 3.1. The areas in blue have between one to three attractors that would use this are to get to the destination. Those in the yellow and orange have between four and five attractors within a 15-minute walk from Main Street. These results highlight the areas along Main Street where a level of priority should be given for bicycle and pedestrian improvements to access a higher number of attractors.

(\*) Source: TCRP Report 112: Improving Pedestrian Safety at Unsignalized Crossings (NCHRP Report 562)

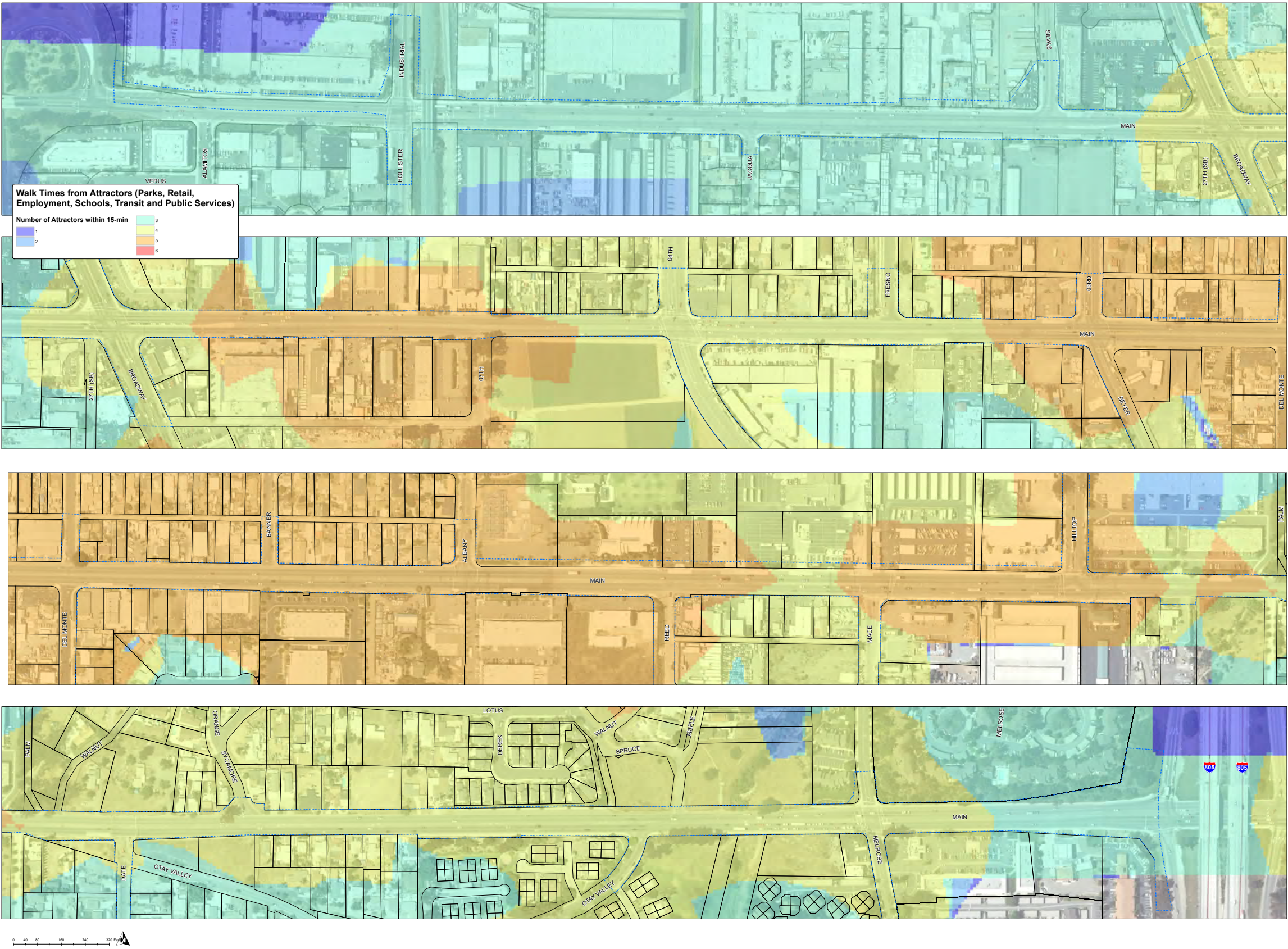


Fig. 3.1: Walk Time Analysis



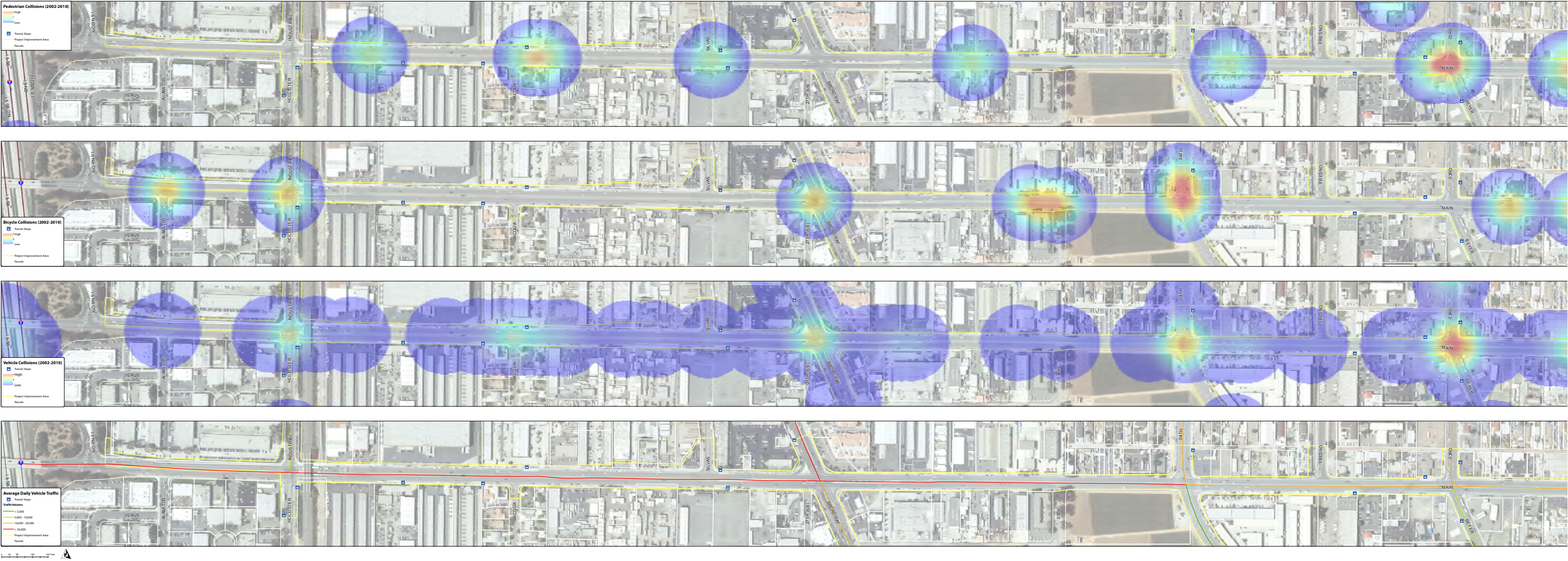


Fig. 3.2-A

3.2 Collisions and ADT's

Chula Vista Main Street collision data shows the number of bicycle, pedestrian and vehicular related collisions collected between 2002 and 2010 from the California Statewide Integrated Traffic Records System (SWITRs). A summary of these collisions on Main Street are in the following tables. The data shows a significant number of collisions that would indicate attention to countermeasures should be provided in this study. Of particular concern are the 4 pedestrian fatalities, potentially related to the lack of designated or controlled crossing points. Also, a substantial

number of vehicular collisions are left turning yield violations into oncoming traffic. This is perhaps due to the free nature of left turns along the corridor and the lack of gaps between groupings of vehicles related to the limited number of traffic signals.

Pedestrian Collisions (first row above)

Collision Type	Number of Collisions
Injured	17
Non-Injured	3
Fatal	4
Total Injured or fatal	21
Total incidents	20

On a few pedestrian collisions, there were both an injury and fatality, or multiple injuries.

Bicycle Collisions (second row above)

Collision Type	Number of Collisions
Injured	13
Non-Injured	0
Fatal	0
Total Injured or fatal	13
Total incidents	13





Fig. 3.2-B

*Vehicular Collisions (third row above)*

Collision Type	Number of Collisions
Injured	602
Non-Injured	3
Fatal	10
Total Injured or fatal	612
Total incidents	384

On a number of vehicular collisions, there were both an injury and fatality, or multiple injuries.

*Average Daily Vehicular Traffic (fourth row above)*

The following table summarizes the collisions between the three modes of travel along Main Street. The collision identifies that bicycle and pedestrian collisions along Main Street have all involved a vehicle. There are no bicycle collisions that involved pedestrians. Figure 3.2 also shows

Collision	Number of Collisions
Vehicle-vehicle	384
Vehicle-bicycle	13
Vehicle-pedestrian	20
Total incidents	417

the corridor’s ADT, determined from a variety of sources and dates. The ADTs are fairly significant with peak hour rates resulting in some congestion. A significant portion of the trips are through trips, not destined for housing origins or destinations found on the corridor or within the immediate study area. This would indicate that the route is being used as a short-cut between freeway segments when these freeways are congested or as a high speed route that allows for faster urban travel with limited edge friction (elements along the roadway that slow down traffic) and signalization.





Fig. 3.3-A

3.3 Potential ROW Improvements

A variety of design elements have been considered as shown on the alternatives shown in Figure 3.3. These elements include wide sidewalks, planted parkways and/or street trees in grates, protected parallel parking, complete bus stops (shelters, trash receptacles, seating), enhanced paving, safe crosswalks, lighting, median planting, bike facilities and small travel lanes.

The intent of the alternatives shown above was to test different right of way limitations given different expansion widths. The overall goal is to avoid building demolitions, reconfigurations of property driveways and parking areas and limitation on right of way acquisition.





Fig. 3.3-B





Fig. 3.4-A

3.4 Existing Conditions Summary

Figure 3.4 represents a summary of all of the existing circulation facilities and land uses within the study area. Vehicular, pedestrian and bike facilities that exist, have been shown. In the case of bike facilities, proposed routes and lanes have also been identified on the map above. Future land uses indicated in the Chula Vista General Plan are also indicated. With the exception of proposed bike facilities, the circulation and land uses changes proposed for the area are minimal.

Existing Pedestrian Infrastructure

Sidewalks

- Missing
- Present

Other Pedestrian Infrastructure

- Marked Crossing
- Ped Refuge
- Transit Stops
- Project Improvement Area
- Parcels

(first row above)

Existing and Recommended Bicycle Facilities

Existing Bicycle Facilities

- Class I
- Class II
- Class III
- Project Improvement Area

Recommended Bicycle Facilities

- Class I
- Class II
- Class III
- Transit Stops
- Parcels

(second row above)

Existing Land Use

Industrial

- Industrial Park
- Light Industry
- Extractive Industry
- Wholesale Trade
- Warehousing
- Other Industrial Uses

Project Improvement Area

(third row above)

Commercial

- Community Shopping Center
- Arterial Commercial
- Neighborhood Shopping Center
- Other Retail Trade & Strip Commercial
- Automobile Dealership

Residential

- Multi-Family Residential
- Single Family Residential
- Spaced Rural Residential
- Mobile Home Park
- Transit Stops
- Parcels





Fig. 3.4-B



(fourth row above)



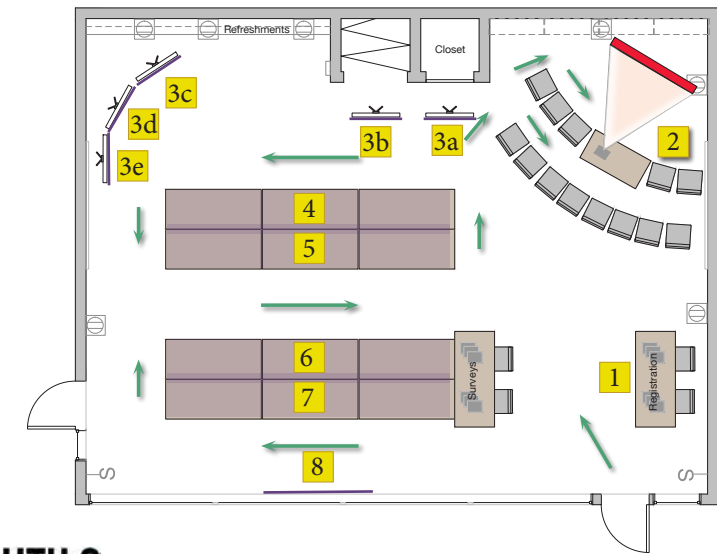




Chapter Four:  
PROGRESS MEETING  
DEVELOPMENT

4.1 Progress Meeting #1

The intent of the first community workshop was to focus on the overall Main Street three-mile existing conditions and to engage the public in identifying various program elements and documenting their concerns and desires. The format of the progress meeting was to present and introduce the design team along with City’s staff. The design team then reviewed and discussed the existing elements of Main Street. The purpose of engaging the community was to obtain input for consideration in the next phase of the project, which included concept alternative development.



KTU+ Chula Vista Main Street Workshop - October 17th, 2013



## MAIN STREET MASTER PLAN

### Progress Meeting Invitation



Dear Main Street Property Owner:

The City of Chula Vista invites you to participate in our upcoming efforts to improve the public right-of-way along Main Street and neighboring streets between I-5 and I-805 through the development of a “Streetscape Master Plan” for the area.

As the owner of a property fronting on Main Street, the City wants to ensure that your ideas and priorities for the district are included in this Streetscape Plan. On Thursday October 17th, the City plans to hold a progress meeting to gather input for the master plan. The meeting is scheduled from 6-8 pm at the Otay Recreation Center, 3554 Main Street, Chula Vista, CA 91911. We hope you will attend. Please see and share the attached flyer.

Also included in this package is a questionnaire. Please fill this out and bring it to the progress meeting; if unable to attend, return it to Patricia Fermán, whose contact information is listed on the questionnaire.



## MAIN STREET MASTER PLAN

### Progress Meeting #1

at the Otay Recreation Center  
3554 Main Street, Chula Vista, CA 91911  
on Thursday 17th October 2013





#### SCHEDULE

6:00 - 6:30 pm Design Team Presentation  
6:30 - 8:00 pm Design Workshop & Discussion

#### ACTIVITIES

Come to provide your input on ways we can design Main Street to be:

- More aesthetically pleasing & environmentally sound
- Safer for pedestrians, cyclists & automobile drivers
- Transit-Friendly
- Better connected to Otay Valley Regional Park and other points of interest

Learn about the background of the project from the staff, meet the consultants, and talk with them one-on-one. Come to provide notes for issues and ideas on maps along this 3 mile corridor.

For more information, please contact: Patricia Fermán, City of Chula Vista, [PFerman@ci.chula-vista.ca.us](mailto:PFerman@ci.chula-vista.ca.us)



## MAIN STREET MASTER PLAN

### Questionnaire



On July 25, 2009 and May 19, 2010, the Development Services Department sponsored two Workshops for Chula Vista’s Main Street area to gather early input from stakeholders. The comments have been summarized below:

- Create a multi-modal street balancing the needs of pedestrians, bicyclists, vehicles and public transportation
- Provide a pedestrian friendly environment with consistent sidewalks, safe crosswalks, and accessible ramps
- Beautify the street with a segmented landscaped median and shade trees where possible
- Analyze bus stop locations and bus shelter amenities
- Look for opportunities for public art
- Preserve the heritage of the area
- Pedestrian / Bike connections to Otay Valley Regional Park and other points of interest
- Gateway markers

Based on the above list, please answer the following questions to help us understand your ideas and opinions.

1) Please rank the following street design elements in order of preference. Number 1 represents the most important to you, and number 14 represents the least important.

Continuous sidewalks	Bus shelters and benches
Bike lanes	Additional controlled crosswalks
Planted parkways	Improved lighting
Planted segmented medians	Public art
Shade trees along walkways	Directional signage
On-street parallel parking	Gateway theme
Marked crosswalks	other: _____

2) How do you primarily access Main Street?

<input type="checkbox"/> Vehicle	<input type="checkbox"/> Public Transportation
<input type="checkbox"/> Walking	<input type="checkbox"/> Skateboarding
<input type="checkbox"/> Biking	<input type="checkbox"/> other: _____

3) How often do you visit the area? For what purpose?

<input type="checkbox"/> Daily	<input type="checkbox"/> Own business	<input type="checkbox"/> Passing through only
<input type="checkbox"/> Weekly	<input type="checkbox"/> Shop / Dine	<input type="checkbox"/> School
<input type="checkbox"/> Once a month	<input type="checkbox"/> Employment	<input type="checkbox"/> Residence
<input type="checkbox"/> other: _____	<input type="checkbox"/> Recreation Center	

4) Do you have any personal observations or stories of the area that you would like to share?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

5) Main Street is designated as a 4-lane major street with a design standard that is 104 feet wide. Where optimum design standards may not be achievable, which elements do you think should be modified to allow the other elements to be implemented? (You can refer to your priority list from Question #1.)

<input type="checkbox"/> Drop a travel lane	<input type="checkbox"/> Add parkway planting strips
<input type="checkbox"/> Decrease the width of travel lanes	<input type="checkbox"/> Add walkways
<input type="checkbox"/> Remove on street parking where it exists	<input type="checkbox"/> Limit left turns across roadway
<input type="checkbox"/> Add a bike lane	<input type="checkbox"/> other: _____
<input type="checkbox"/> Narrow the center turning lane	

6) What best describes your relationship with Main Street?

<input type="checkbox"/> Live on Main St.	<input type="checkbox"/> Live in northwest Chula Vista
<input type="checkbox"/> Live in neighborhood near Main St.	<input type="checkbox"/> Live in southwest Chula Vista
<input type="checkbox"/> Only work in Chula Vista	<input type="checkbox"/> Live in northeast Chula Vista
<input type="checkbox"/> Only visit Chula Vista	<input type="checkbox"/> Live in southeast Chula Vista

7) Do you know of any other groups, organizations or businesses that should be involved in developing the Master Plan?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

8) Do you have any other comments or ideas to improve Main Street?

\_\_\_\_\_

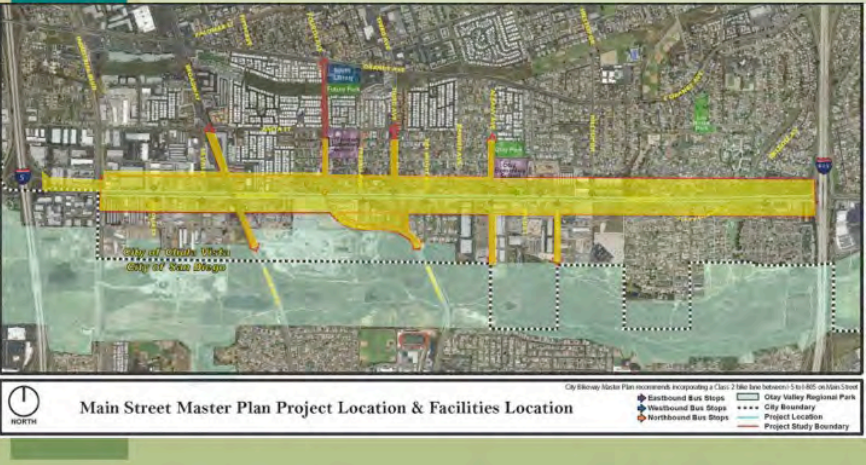
\_\_\_\_\_

\_\_\_\_\_

Thank you for your time and participation! Your input is essential to this project’s success. Please bring completed form to progress meeting; if unable to attend, fold at the dashed line below, tape the edges together and apply a stamp to mail no later than Oct. 17th 2013. Or you can fax it to (619) 691-5171.



Project Boundaries



Urban Design Workshops  
Resulting Comments

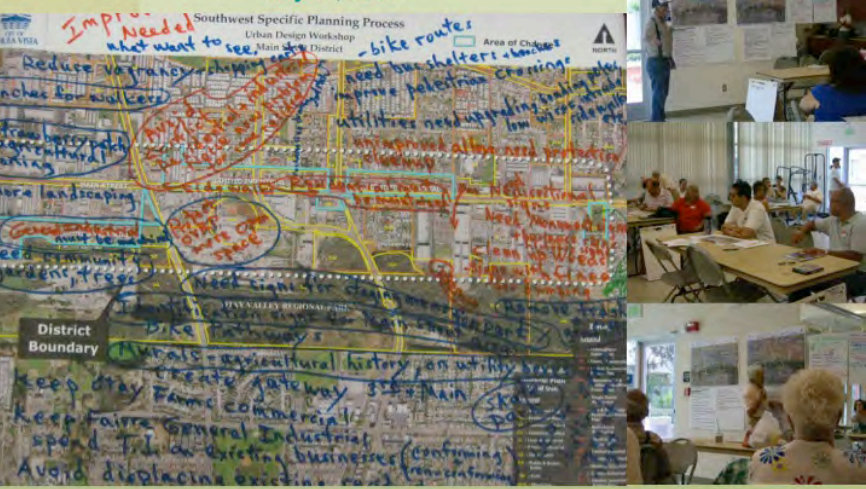
- Create a multi-modal street for pedestrians, bicyclists, vehicles, and public transportation
- Provide consistent sidewalks, safer crosswalks, accessible ramps
- Beautify with landscape and segmented medians
- Revisit bus stop locations and bus shelters
- Suggest public art & gateway markers
- Preserve the heritage of the area
- Provide pedestrian/bike connections to Otay Valley regional park and other points of interest

What we Hope to Accomplish Soon

ALTERNATIVE DEVELOPMENT

- Develop 2-3 alternative concepts including:
  - ✓ Corridor theme with points of interest
  - ✓ Streetscape design
  - ✓ Bike and pedestrian mobility concepts
  - ✓ Harmonizing elements & unique treatments
  - ✓ Plans, cross sections & sample images
  - ✓ 3D graphics for 2-3 alternative concepts.

Urban Design Workshop  
July 25, 2009



Accomplished to Date

ANALYSIS OF EXISTING CONDITIONS

- Walk the site, photo documentation & analysis site
- Prepare base map for study area
- Summarize
  - ✓ existing land use conditions
  - ✓ existing mobility issues and conditions
  - ✓ existing design, character & aesthetic conditions
  - ✓ existing ROWs, curb to curb improvements, lane geometry & streetscape elements
- Determine study area points of interests, destinations and connection potentials.
- Prepare an existing conditions and assets/liabilities/constraints/opportunities map.

What we Hope to Accomplish in November

SECOND COMMUNITY WORKSHOP

- Present workshop survey findings and results to Community
- Present alternative concepts to the community
- Document and record all input and ideas from community

PREPARATION OF CONCEPTUAL DESIGN

- Develop selected Conceptual Plan inclusive of:
  - ✓ Corridor theme with points of interest.
  - ✓ Streetscape design
  - ✓ Bike and pedestrian mobility concepts
  - ✓ Harmonizing elements & unique treatments
  - ✓ Plans, cross sections, sample images & 3D concept graphics

Urban Design Workshop  
May 19, 2010



Hope to Accomplish Tonight

FIRST COMMUNITY WORKSHOP

- Present site analysis findings to community
- Obtain community ideas, input and framework of design vision for Main Street
- Document and record all findings

What we Hope to Accomplish in December


PRESENTATION TO COMMUNITY

- Present selected conceptual plan to the community
- Document and record any final input from community

PREPARATION OF FINAL CONCEPTUAL DESIGN


- Develop final conceptual plan package inclusive of:
  - ✓ Corridor theme with points of interest
  - ✓ Streetscape design
  - ✓ Bike and pedestrian mobility concepts
  - ✓ Harmonizing elements & unique treatments
  - ✓ Plans, cross sections, sample images & 3D concept graphics





MAIN STREET MASTER PLAN

Questionnaire



On July 25, 2009 and May 19, 2010, the Development Services Department sponsored two Workshops for Chula Vista's Main Street area to gather early input from stakeholders. The comments have been summarized below:

- Create a multi-modal street balancing the needs of pedestrians, bicyclists, vehicles and public transportation
- Provide a pedestrian friendly environment with consistent sidewalks, safe crosswalks, and accessible ramps
- Beautify the street with a segmented landscaped median and shade trees where possible
- Analyze bus stop locations and bus shelter amenities
- Look for opportunities for public art
- Preserve the heritage of the area
- Pedestrian / Bike connections to Otay Valley Regional Park and other points of interest
- Gateway markers

Based on the above list, please answer the following questions to help us understand your ideas and opinions.

1) Please rank the following street design elements in order of preference. Number 1 represents the most important to you, and number 14 represents the least important.

1 Continuous sidewalks	2 Bus shelters and benches
5 Bike lanes	3 Additional controlled crosswalks
9 Planted parkways	7 Improved lighting
5 Planted segmented medians - Low Plants	14 Public art
4 Shade trees along walkways	12 Directional signage
11 On-street parallel parking	13 Gateway theme
16 Marked crosswalks	10 other: <u>Respect for business owners</u>

2) How do you primarily access Main Street?

<input checked="" type="checkbox"/> Vehicle	<input type="checkbox"/> Public Transportation
<input type="checkbox"/> Walking	<input type="checkbox"/> Skateboarding
<input type="checkbox"/> Biking	<input type="checkbox"/> other:

3) How often do you visit the area? For what purpose?

<input type="checkbox"/> Daily	<input type="checkbox"/> Own business	<input type="checkbox"/> Passing through only
<input checked="" type="checkbox"/> Weekly	<input checked="" type="checkbox"/> Shop / Dine	<input type="checkbox"/> School
<input type="checkbox"/> Once a month	<input type="checkbox"/> Employment	<input type="checkbox"/> Residence
<input type="checkbox"/> other:	<input type="checkbox"/> Recreation Center	<input type="checkbox"/>

4) Do you have any personal observations or stories of the area that you would like to share?

there is an effort to maintain the 45+ main property for agricultural uses. Educational facet could include teaching children where food comes from and how it is grown.

5) Main Street is designated as a 4-lane major street with a design standard that is 104 feet wide. Where optimum design standards may not be achievable, which elements do you think should be modified to allow the other elements to be implemented? (You can refer to your priority list from Question #1.)

<input type="checkbox"/> Drop a travel lane	<input type="checkbox"/> Add parkway planting strips
<input type="checkbox"/> Decrease the width of travel lanes	<input type="checkbox"/> Add walkways
<input type="checkbox"/> Remove on street parking where it exists	<input type="checkbox"/> Limit left turns across roadway
<input type="checkbox"/> Add a bike lane	<input checked="" type="checkbox"/> other: <u>Buy property to facilitate change</u>
<input type="checkbox"/> Narrow the center turning lane	

6) What best describes your relationship with Main Street?

<input type="checkbox"/> Live on Main St.	<input type="checkbox"/> Live in northwest Chula Vista
<input type="checkbox"/> Live in neighborhood near Main St.	<input checked="" type="checkbox"/> Live in southwest Chula Vista
<input type="checkbox"/> Only work in Chula Vista	<input type="checkbox"/> Live in northeast Chula Vista
<input type="checkbox"/> Only visit Chula Vista	<input type="checkbox"/> Live in southeast Chula Vista


7) Do you know of any other groups, organizations or businesses that should be involved in developing the Master Plan?

Crossroads III organization  
Southwest Civic Association

8) Do you have any other comments or ideas to improve Main Street?

Change the entry to the recycle center next to Smart & Final. the cars back up on Main st. creating a dangerous situation.  
where needed, allow right turn only from businesses

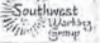
Thank you for your time and participation! Your input is essential to this project's success. Please bring completed form to progress meeting; if unable to attend, fold at the dashed line below, tape the edges together and apply a stamp to mail no later than Oct. 17th 2013. Or you can fax it to (619) 691-5171



PLAN MAESTRO DE LA CALLE

MAIN

Cuestionario



El 25 de Julio del 2009 y el 19 de Mayo del 2010, el Departamento de Desarrollo patrocinó dos Talleres de Diseño Urbano sobre la calle Main los cuáles se llevaron a cabo en el Centro Recreativo de Otay. Los comentarios han sido utilizados para crear la siguiente lista de elementos para ser incluidos en el Plan:

- Creación de una calle que equilibre las necesidades de los peatones, ciclistas, vehículos y transporte público
- Creación de un ambiente más seguro para los peatones por medio de aceras, cruces peatonales y rampas peatonales
- Embellecimiento por medio de árboles y plantas
- Refugios y bancas en las paradas de los autobuses
- Arte Público
- Preservación de la historia del área
- Conexiones para peatones/ciclistas al Parque Regional del Valle Otay y otros puntos de interés
- Elementos marcando las entradas principales a la calle Main (Gateway)

Basado en la lista anterior, por favor conteste las siguientes preguntas para ayudarnos a entender sus ideas, opiniones, y prioridades.

1) Clasifique los siguientes elementos en orden de preferencia. El número 1 representa el elemento más importante para usted, y el número 14 representa el menos importante.

<input checked="" type="checkbox"/> aceras continuas	<input type="checkbox"/> más cruces controlados
<input checked="" type="checkbox"/> carriles para las bicicletas	<input type="checkbox"/> mejor iluminación
<input type="checkbox"/> jardineras en las orillas de las aceras	<input type="checkbox"/> arte público
<input type="checkbox"/> medianas/camellones segmentados con jardineras	<input type="checkbox"/> señalización direccional
<input checked="" type="checkbox"/> árboles de sombra en las aceras	<input type="checkbox"/> elementos marcando las entradas principales a la calle Main (Gateway)
<input checked="" type="checkbox"/> estacionamiento en la calle	<input type="checkbox"/> otro:
<input checked="" type="checkbox"/> cruces peatonales marcados	
<input checked="" type="checkbox"/> refugios y bancas en las paradas de los autobuses	

2) ¿Cómo llega a la Calle Main?

<input checked="" type="checkbox"/> carro	<input type="checkbox"/> transporte público
<input type="checkbox"/> caminando	<input type="checkbox"/> Monopatíneta
<input type="checkbox"/> bicicleta	<input type="checkbox"/> otro:

3) ¿Cada cuánto utiliza la Calle Main? ¿Y con qué propósito?

<input checked="" type="checkbox"/> Diario	<input type="checkbox"/> Dueño de negocio	<input type="checkbox"/> Acceso a las autopistas
<input type="checkbox"/> Semanalmente	<input type="checkbox"/> Compras / comer	<input type="checkbox"/> Escuelas
<input type="checkbox"/> Una vez al mes	<input type="checkbox"/> Empleo	<input checked="" type="checkbox"/> Residencial
<input type="checkbox"/> otro:	<input type="checkbox"/> Centro de recreación	

4) ¿Tiene observaciones personales del área que le gustaría compartir?

Tengo muchos RUCs viviendo aquí en la main mi Drive way esta en muy malas condiciones

5) ¿La Calle Main ha sido designada como una calle principal con 4-carriles y un ancho estándar de 104 pies de ancho. En áreas donde el ancho de la calle es menos de 104 pies, cuales elementos cree usted que deben ser modificados para permitir que los demás elementos puedan realizarse? Puede consultar la lista de prioridades de la pregunta #1.

<input type="checkbox"/> Eliminar un carril de tránsito	<input type="checkbox"/> Añadir jardineras en las aceras
<input type="checkbox"/> Disminuir el ancho de los carriles de tránsito	<input type="checkbox"/> Añadir aceras
<input type="checkbox"/> Eliminar el estacionamiento en la calle	<input type="checkbox"/> Limitar dobles a la izquierda a través de la carretera
<input checked="" type="checkbox"/> Añadir carriles para bicicletas	<input type="checkbox"/> otro
<input type="checkbox"/> Reducir el ancho del carril del centro	

6) ¿Cual es su relación con la Calle Main?

<input checked="" type="checkbox"/> Vivo en la Calle Main	<input type="checkbox"/> Vivo en el noroeste de Chula Vista
<input type="checkbox"/> Vivo en un vecindario cerca de la Calle Main	<input type="checkbox"/> Vivo en el suroeste de Chula Vista
<input type="checkbox"/> Trabajo en Chula Vista	<input type="checkbox"/> Vivo en el noreste de Chula Vista
<input type="checkbox"/> Visito Chula Vista	<input type="checkbox"/> Vivo en el sureste de Chula Vista

7) ¿Sabe de otros grupos, organizaciones ó empresas que deben participar en la elaboración del Plan Maestro?

NO

8) ¿Tiene algun otro comentario ó ideas para mejorar la Calle Main?

COMPANER DRIVEWAY

Gracias por su tiempo y participación! Su información es esencial para el éxito de este proyecto. Por favor traiga esta forma completada a la junta; si no puede asistir, por favor envíela por correo o por facsimile al (619) 691-5171 antes del 17 de Octubre, 2013. Para enviarla por correo: Doble la forma por mitad, pegue los bordes con cinta adhesiva, y ponga un sello postal. Gracias.

CHULA VISTA MAIN STREET WORKSHOP 10.17.13

1. DANIEL J. JAND CHEK	24. BEN ELQUEZABAL
2. V. R. PARTIDA, MSW	25. RICARDO MARISCAL
3. BEUNDA FORTES & RAUL FORTES	26. CATALINA MARISCAL
4. MARIA ARIZACA MANN	27. RANDY VANVLECK
5. MARY ROSS WADSWORTH	28.
6. Suchitra Mukherjee	29. Samuel LOPEZ
7. Lisbet Street	30.
8. Tom Adler CV.	31.
9. Tom Tran	32.
10. David Street	33.
11. ANTONIA CHISHOLM	34.
12. Ruth Martine-L Paconelli	35.
13. ANNE LEAF	36.
14. Ed Mairal	37.
15. Maria Elena Mariscal	38.
16. Linda Brown	39.
17. MARY RADLEY - CITY OF CHULA VISTA	40.
18. FRANK RIVERA - CITY OF CHULA VISTA	41.
19. Yvonne Blantz	42.
20. Cynthia Hernandez	43.
21. Mary Perkins	44.
22. MARGARITA GARCIA	45.
23. Gerardo Garcia	46.
	47.
	48.
	49.
	50.

V. R. Partida MSW

Progress Meeting #1 PowerPoint slides (on previous page), sample questionnaires submitted by participants, and attendee sign-in sheet

Progress Meeting Development

25



CHULA VISTA MAIN STREET MASTER PLAN QUESTIONNAIRE TALLY / COMMENTS

(26 surveys)

1) Street Design Elements Ranking	1	2	3	4	5	6	7	8	9	10	11	12	13	14	(comments)	(points)
Continuous sidewalks	18		1	2		2							1			306 ✨
Marked crosswalks	3	8	1	1	4	4	1	1								260
Improved lighting	3	5	3	5		2	2			1	1					241
Bike lanes	2	6	3		2	2	2	1	1	4		1			protected bikeways	232
Bus shelters and benches		2	3	5	2	2	3	2	1	1	1		1			210
Additional controlled crosswalks	2		3	3	3	3	4		1	1	1	2				207
Shade trees along walkways			2	2	4	1	3		4	1	2	1	1	1		162
Directional signage	1		4		1	3		5	1		2	4				160
On-street parallel parking	1	2		4	2		2	1			2	2	3	3		150
Planted parkways		1	2	1			1	3	6	3	2	1		1		140
Planted segmented medians		1	2		1	2	2	3	2	1	1	2	2	3	low plants	136
Public art				1		1		3	2	2	4	4	2	2		97
Gateway theme			1		1				1	4	2	3	7	1		80
(other:)																
Traffic Calming					2											20
Respect for business owners										1						5
Roundabouts											1					4

2) Primary access to Main Street	
Vehicle	23
Biking	4
Walking	1
Public Transportation	1
Skateboarding	0

3a) How often do you visit the area?	
Daily	14
Once a month	5
Weekly	3

3b) For what purpose?	
Residence	11
Own business	5
Shop / Dine	2
Passing through only	2
Employment	1
Recreation Center	1
School	0

4) Personal stories / observations	
• There is an effort to maintain the 4th & main property for agricultural uses. Educational facet could include teaching children where food comes from and how it is grown.	
• "This is a very dark street in the early morning, it's hard to see and I feel unsafe when I get up to go to work. The bus stops are also very dark and there are sidewalks missing. There's also a need for more public furnishings and amenities such as benches, telephones, and gardens/planters".	
• Well, we'd like to keep the street new & clean. Fix rundown, abandoned buildings & businesses. Beautify this city. Not so "ghetto" looking.	
• Existing trash, waste, & unkept vegetation on empty lot next to the west side of our property (3855 Main St.) blocks view of traffic & has become a potential hazard to exiting cars.	
• How about leaving Main St. alone and apply those funds to the Nature Interpretive Center in Chula Vista?	
• Woodland Park was the first African American community in Chula Vista.	
• Many years ago Main St. was only a two lane road. It was widened to its present condition. I see no reason to widen it anymore.	
• Overlay job is a nightmare. Biking conditions are terrible. Main St. buildings are funky and I like that. Don't gentrify it.	
• Large trash trucks. Speed limit.	
• Parents own property on Main St. since 1940's. Many changes and growth. (smiley face)	
• I have been living on Main St. for many years, my driveway is in very bad condition	
• It really needs sidewalks.	
• Trucks & buses need the center lane to turn into & out of businesses and bus garage safely.	

\*The number of persons who selected the item, multiplied by the indicated priority = total points.  
Higher points = most selected as high priority.

5) Which elements do you think should be modified to allow other elements to be implemented?			(comments)
Drop a travel lane	5		No!
Decrease the width of travel lanes	2		Harder for trucks.
Remove on street parking where it exists	13		
Add a bike lane	10		
Narrow the center turning lane	5		
Add parkway planting strips	4		
Add walkways	12		
Limit left turns accross roadway	2		This will disrupt businesses.
(other:)			Main St. is the faster option than Orange, don't ruin it.
Buy property to facilitate change	1		

6) What best describes your relationship with Main Street?	
Live on Main St.	9
Live in neighborhood near Main St.	6
Only work in Chula Vista	4
Only visit Chula Vista	1
Live in northwest Chula Vista	0
Live in southwest Chula Vista	8
Live in northeast Chula Vista	2
Live in southeast Chula Vista	1

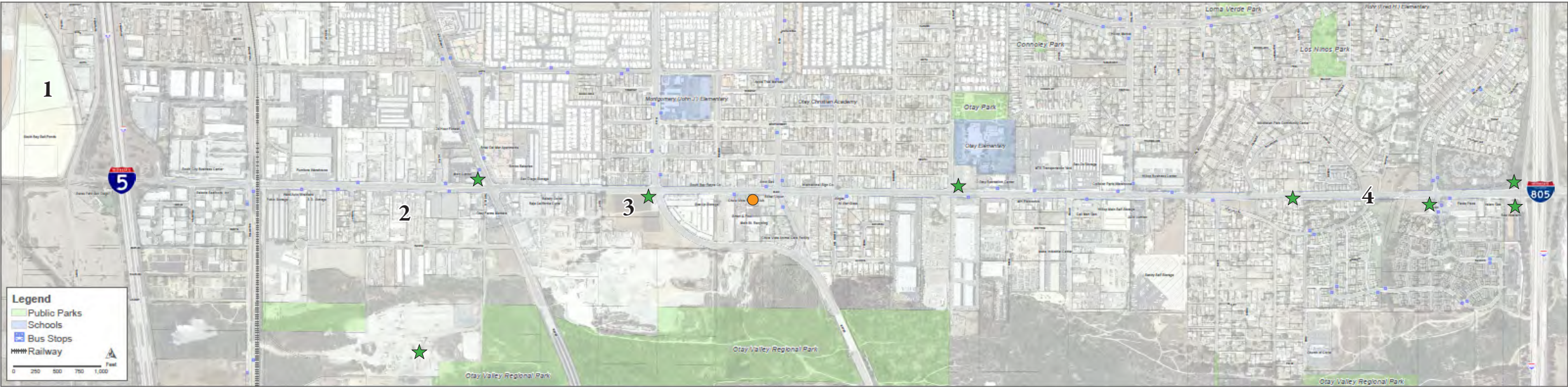
7) Do you know of any other groups, organizations or businesses that should be involved in developing the Master Plan?	
• Crossroads II Organization, Southwest Civic Association	
• Parks & Recreation, Historical Society, Biking Groups	
• Chula Vista ad hoc Bike/Walk Committee, SD County Bike Coalition	
• Permanent Residents	
• Historical comission, possibly various historical societies like SOHO. All businesses currently on Main Street.	

8) Do you have any other comments or ideas to improve Main Street?	
• Change the entry to the recycle center next to Smart & Final. The cars back up on Main St. creating a dangerous situation. Where needed, allow right turn only from businesses.	
• Abandoned buildings/businesses, run down property need to be fined so they can keep property value up. Beautify the city!	
• Curb, sidewalk & on street parking would reduce our building square footage to be eliminated.	
• Have empty lots cleaned of trash and waste to avoid becoming a fire hazard, and also have them fenced in for security and aesthetics.	
• Leave Main Street alone and apply the funds to the Nature Interpretive Center for all to enjoy!!	
• Go big! Protected bikeways and roundabouts please.	
• Fix driveway.	
• Needs to be modernized.	
• Continuous walkways/sidewalks would be nice.	
• Clean up the building facades and slow down traffic.	
• Main St. is a VERY important industrial corridor west of Hilltop. Improving & supporting existing businesses MUST be Number One priority.	
East of Hilltop improvements are needed for residential uses, but street is important corridor for trucks, so it needs to be wide.	
• Clean up storefronts, Main St. is pretty "Dog Patch". Slow traffic down on east end around the residential area.	



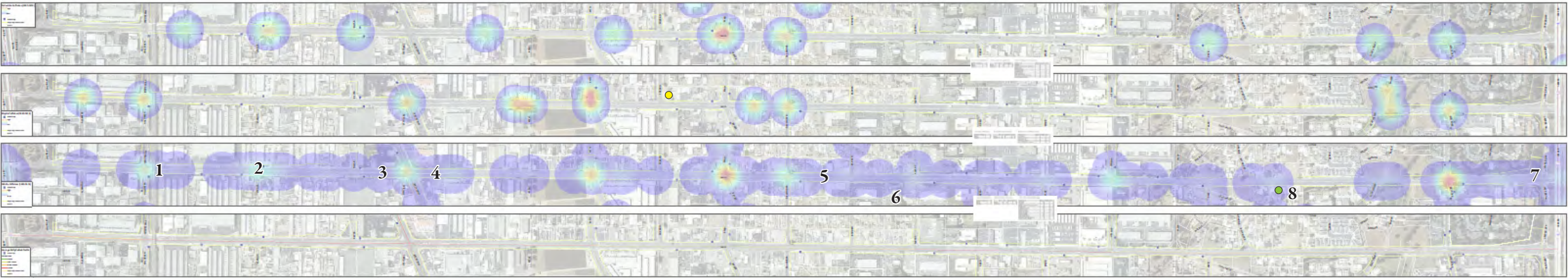
MAIN STREET CONTEXT (Progress Mtg. #1 Comments)

Progress Meeting #1  
Public Input Comments:  
Responses from attendees  
on exhibits presented



- 1) Historic and Wonderful
- 2) Was the Tallest Flagpole in the World at One Time
- 3) Keep Strawberry Field Alive Strawberry Art along this Corridor
- 4) No Transit Shelter, but if there were, concerned about Graffiti

CHULA VISTA COLLISIONS ADT (Progress Mtg. #1 Comments)



- 1) Would like More
  - Trees along Street
  - Shade Protection
  - Crosswalks/Visible

2) Main Street
  - Great Shortcut
  - Traffic Flows Well
  - Visit Honda Dealership
  - Board Member Otay Park
- 3) No Community Gathering Areas, No Open Space

4) Chula Vista
  - “Dorm Community”
  - Most Don’t Walk
  - No Destination why Walk or Bike
- 5) Majority are not Native, Population is very Transient

6) “Lost Pearl”
- 7) Pedestrian Traffic when Concerts End. Late at Night Going West

8) “1971”



EXISTING CONDITIONS *(Progress Mtg. #1 Comments)*



- 1) Used Tire and Car Towing Business Should Relocate to Nirvana Ave Where the Junk Yards are Located. Residential Located across the Street. Relocate this Business

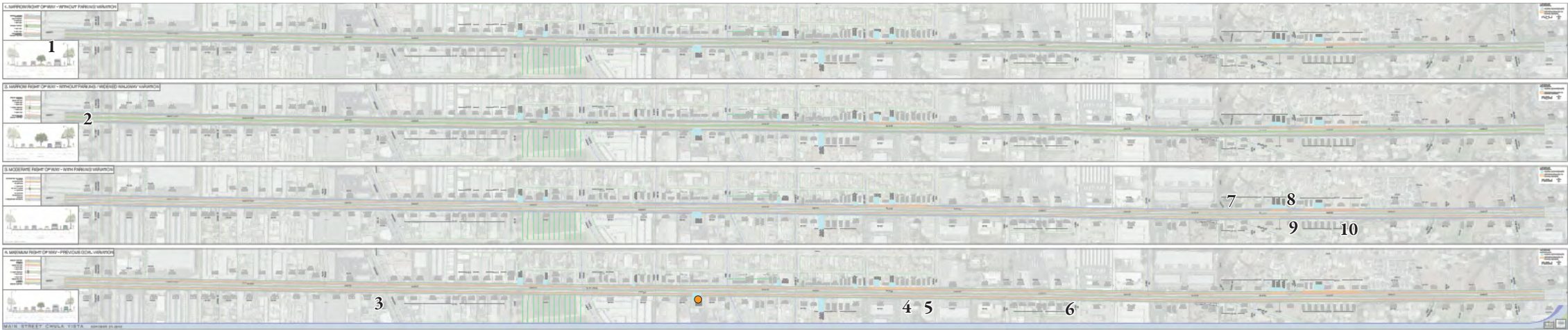
2) Abandoned Car Wash is Unsightly, Devalues Property and Gives this Poor Appearance. Make this Go Away! Do Something
- 3) Control Waste and Trash Dumping, Also Unkempt Vegetation. (Fire Hazard)

4) Need Street Parking and Sidewalks. (4075 Main)
- 5) Sycamore and Main Hard to Get Onto Main Whether Turning Left or Right. Need More Light.

6) Illegal Parking on Edge of Roadway, Creates Lanes that are too Narrow.
- 7) No Sidewalk here the side or End of Street Width is Indicated by my Mailbox

8) Build a Sound and Pollution Reduction Wall. (Daniel Clark)

PHASE ONE POTENTIAL R.O.W. IMPROVEMENTS *(Progress Mtg. #1 Comments)*



- 1) Any Median/Turn will not Help any Barriers

2) Street Lights (Dark) Width of Street Telescopes Dangerous to Drive Good Connector
- 3) Group of Parcels Leading to Otay Valley Regional Park

4) Tow Yards/Trucks not Aesthetically Pleasing to Look At
- 5) Abandoned Car Wash Lot Brings Real estate Value Down

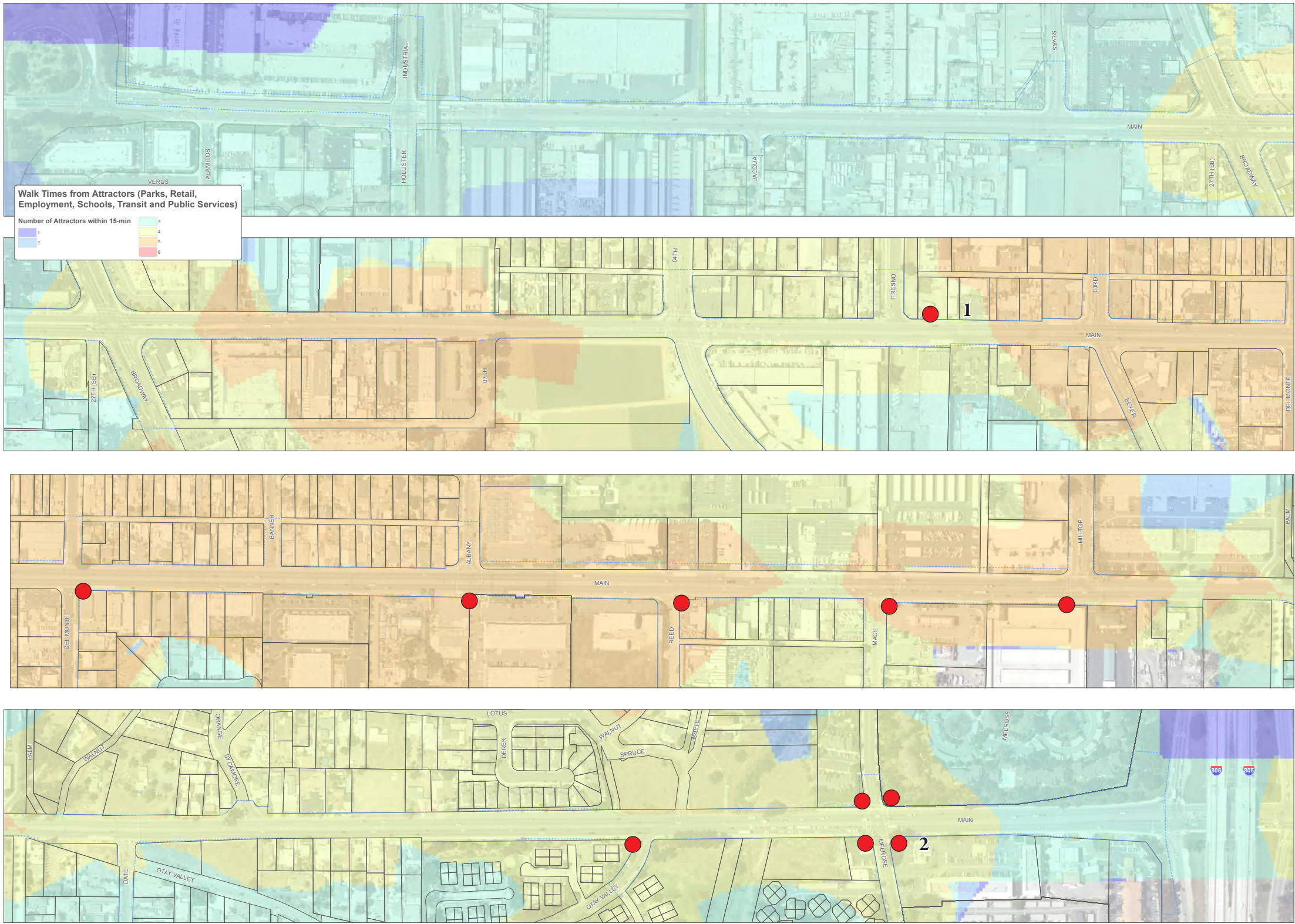
6) Adjacent Property Concerns with Industrial/Commercial Buying Adjacent (Tony/Maria Mariscal)
- 7) Walnut Drive Hidden by Trees

8) Sidewalks and Walkability (Linda Brown)
- 9) Crosswalk and Cars more Fast Here

10) Parking and Sidewalks



# WALKING TIMES COMPOSITE (Progress Mtg. #1 Comments)



1) We Walk and Bike from 3rd/Main to Western Salt Marshlands, Imperial Beach & Coronado

2) Location is Dark and Fast Speeds by the Bus Stop



PEDESTRIAN ISSUES AND SOLUTIONS Selections *(Progress Mtg. #1 Comments)*



2A) Pedestrian actuator (Polara). Photo credit: ITE Pedestrian Bike Council



4C) Retrofitting wide streets and intersections to improve walkability, can be very expensive. It is generally far less expensive to build these streets with pedestrians and cyclists in mind than to retrofit later.



5C) The proper pedestrian environment can support a variety of retail businesses and mixed land uses while offering a pleasant urban design.



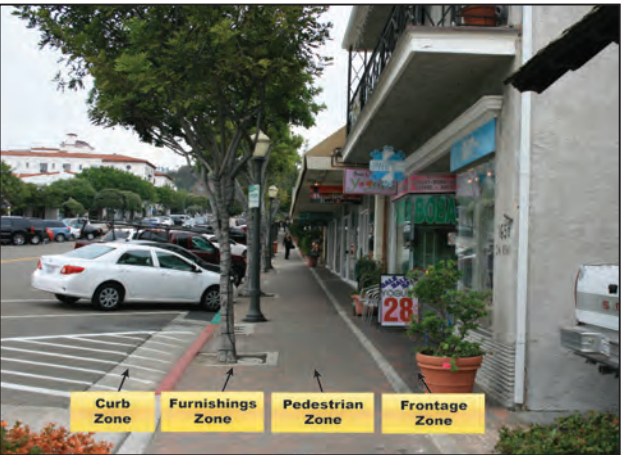
5C) Streets should be designed for more than moving vehicles. When all elements come together, a socially interactive environment will evolve.



6C) To meet accessibility requirements, long ramps are required to access activity centers such as transit stations.



1W) Match the sidewalk width to the intended use. Only suburban residential areas should be allowed at or below a 5' width.



1W) Commercial area widths should approach at least 10' in width since they must accommodate a variety of uses, street furniture and utilities.



3W) If an active street is desired, then accommodations for street furnishings and street uses must be made.



7W) Public art or public amenities with varied and interesting materials can be used for their aesthetic value, as well as for their functional value.





4.2 Initial Design Themes

After receiving input at Progress Meeting #1, the recommendations were refined, requested features added and various schematic alternatives developed to establish a street theme and identity.

The Chula Vista area provides a rich palette from which to select ideas and themes, as well as historical resources that speak to its origins and present-day appearance. In researching community and cultural connections, there were many to choose from for consideration. The history of the area, known today as Chula Vista, can be traced back millions of years through prehistoric fossils of both land and sea types. Around 3000 B.C., Yu-man-speaking people began moving into the area. Many of the Native American Indians in San Diego today are descendants of the Kumeyaay tribe who made the region their home for hundreds of years.

Other significant periods of the history of Chula Vista include the formation of Spanish Land Grants, known as Rancho del Rey or the ‘Kings Ranch’ in 1795, and the ‘American Boom’ period in 1889 when lands were developed for settlers, and the city took form through the creation of streets and avenues.

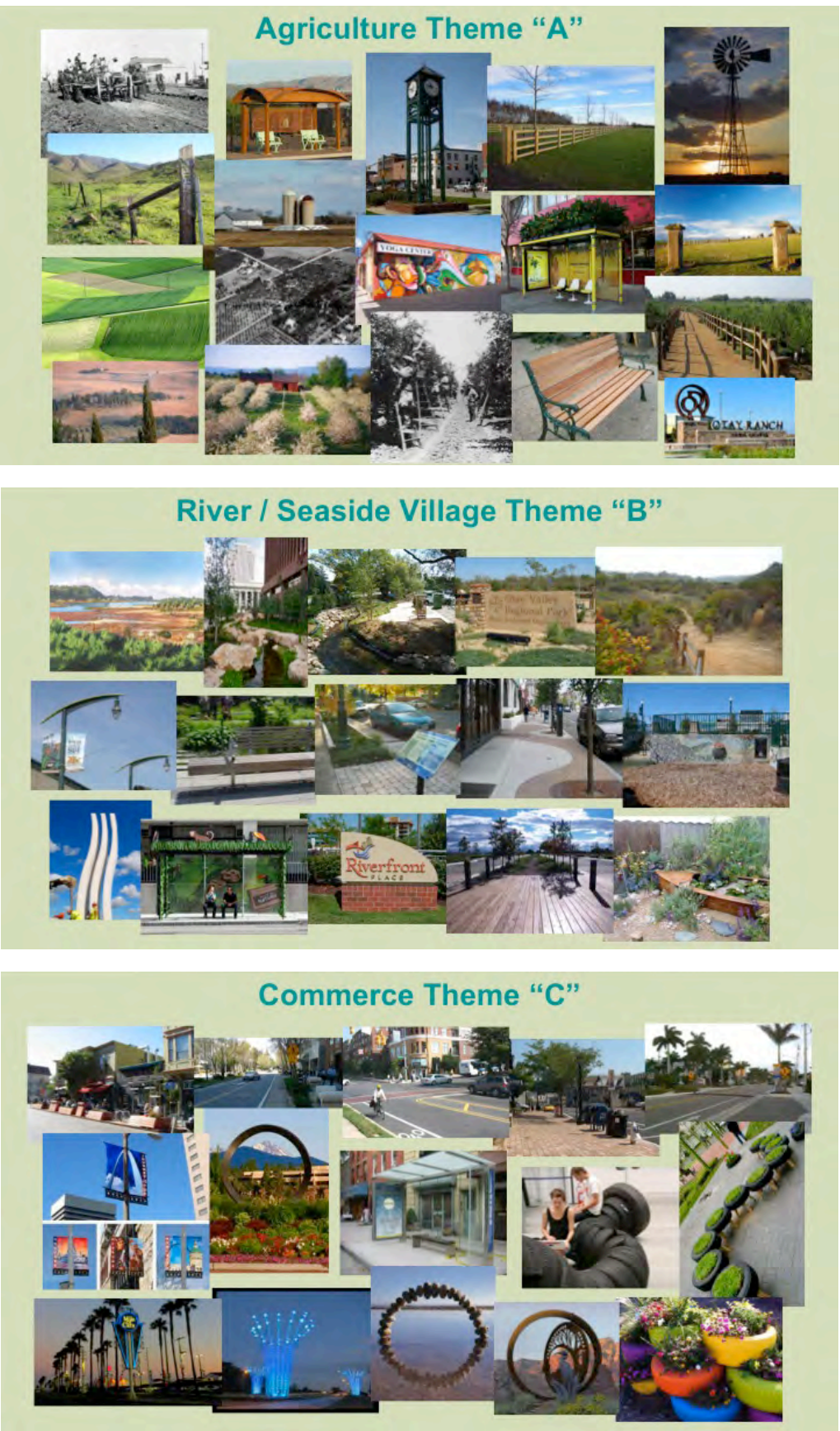
Combining research and interaction between the design team, community and City staff as part of the progress meeting process, a variety of design themes were discussed and presented in the next progress meeting. Themes were developed based on research that examined the early history of the area including historical notes identified by progress meeting participants. Physical site research was performed by the design team by driv-

ing, walking biking and exploring the area and its larger context, and understanding the physical opportunities and constraints of the site. The field work was informed by on earlier analysis of the roadway, its functions, ROW dimensions, and its ability to support multi-modal activities.

- Based on group consensus, three themes emerged:
- Agriculture/Rancho
  - The River
  - The Sea Garden

Although three separate themes could be applied to the entire corridor as uniquely different alternatives, it was also considered possible to use the themes in different areas of the same alternative. The themes were combined into one alternative, with different applications of the themes in different locations of the corridor, separating them into different sections to give a more diverse and special sense of place along Main Street.

Each of the themes features were carefully considered using a design aesthetic standard. These standards were combined with sustainable practices that included: stormwater run-off; drought tolerant planting; satellite controlled irrigation systems; and mulched planters with structural soils. The three themes are briefly described on the pages that follow.





AGRICULTURE/RANCHO



Fig. 4.1-A

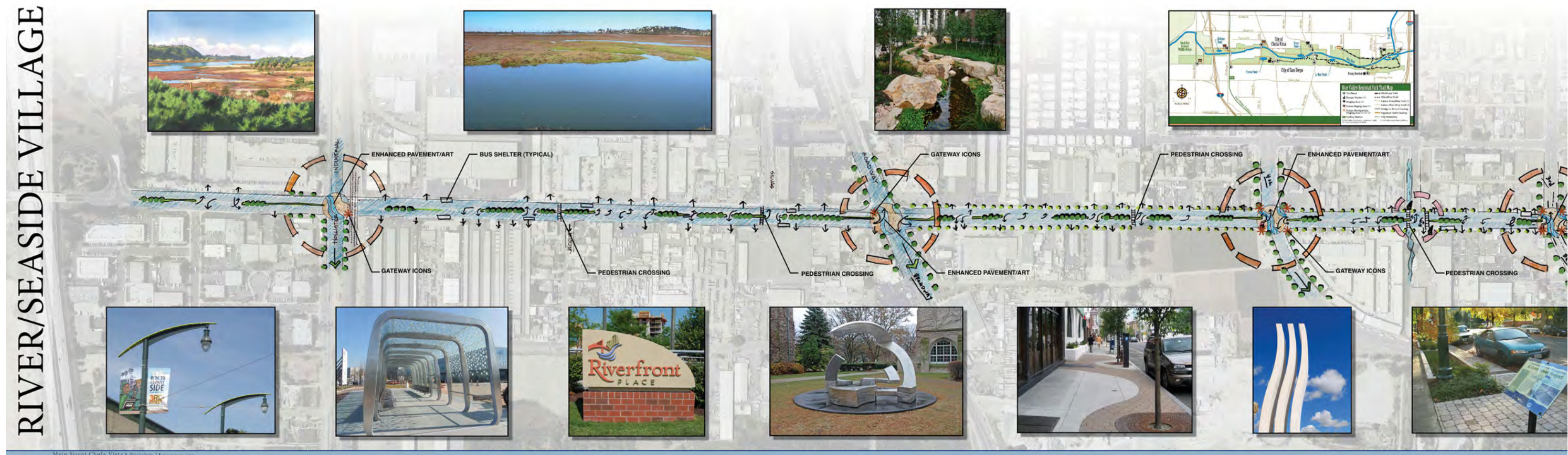
**4.2.1 Agriculture/Rancho Theme**  
The “Agricultural Theme” was inspired by the “Orchard Period” that occurred in Chula Vista in 1888. The significance of Chula Vista as a major lemon-growing center during that period became the basis for further conceptual development in the next phase of work. Community support for this concept was strong in Progress Meeting #2, including such comments as “This is nice, it reminds me of the history of farms in the area.”





Fig. 4.1-B





4.2.2 River/Seaside Village Theme

An additional theme of significance is the adjacent connection to the Otay Regional Park and the Otay River. The Otay Valley Regional Park represents one of the major open space areas within the southern area of San Diego County, linking south San Diego Bay with Otay, San Miguel, and the Jamul Mountains. The river portion of the theme was positively commented on during Progress Meeting #2 – “This is a good image, ties Otay Valley Regional Park to Main St, “ and “Conceptually nice and thoughtful.”

The notion of this area acting as a “Village” was less well received – “Main St. is a place where people & trucks go for a purpose. People don’t come to congregate & mill around.” However, the proximity of the project area to the Bayfront area, and surrounding natural resources suggested that a modified theme – which still incorporated the notions of River and Seaside – should be pursued.

Fig. 4.2-A





Fig. 4.2-B



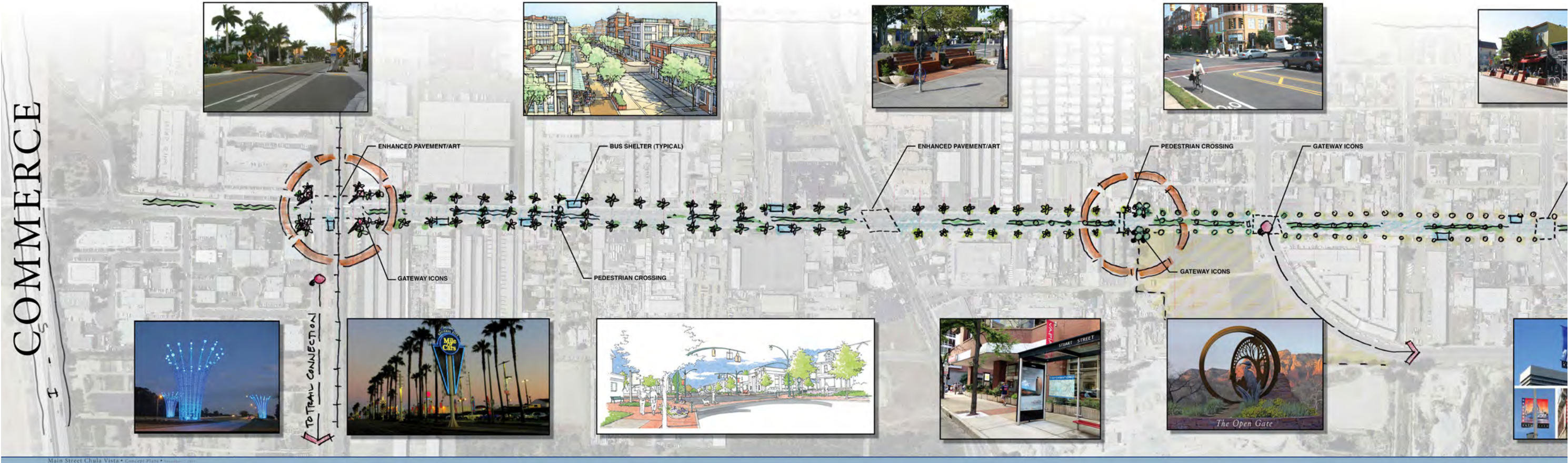


Fig. 4.3-A

4.2.3 Commerce Theme

As has been identified, Main Street is a light industrial corridor with a mix of businesses, including many that focus on automotive repair, salvage, distribution and related services. Tractor-trailer traffic is a prominent aspect of Main Street. In this way, Main Street provides a level of economic opportunity and sustainability to the City. The “Commerce Theme” sought to capitalize on this idea and celebrate the fact that this area provides employment, economic opportunity, and revenue.

Although Main Street is characterized by vibrant economic activity from both large and small businesses, the design exploration of this theme yielded less interesting aesthetic design results than those themes associated with the Bayfront, the Otay River, and the history of the area. The Commerce theme was appreciated in terms of the recognition of the economic vitality, but Progress Meeting participants expressed more enthusiasm for the other themes represented as optional choices.





Fig. 4.3-B





Fig. 4.4-A

4.3 Initial Roadway Concept

Figure 4.4 shown above is the initial concept for the roadway geometry and functional changes proposed for Main Street. The figure shows a variety of potential cross sections that would be applied to the street in different areas. The tighter cross sections were applied to areas with limited existing right of way or in areas where building demolition or functional impacts to the operations of businesses or residents would be negatively affected. Under this concept, no buildings would be required to be demolished and the impacts on properties would be kept to a minimum. Individual elements of the concepts are shown and described on the following pages.





**Fig. 4.4-B**



4.3.1 Right-of-Way Improvements

Each of the items below occurs throughout the entire roadway study area:

- wider sidewalks (6' minimum)
- paved driveways or reconnections to existing paved driveways
- installation of a 6" high concrete curb and 18" wide concrete gutters
- enhanced paving at intersections, especially at marked crosswalks
- enhanced paving at parallel parking spaces, including the potential use of permeable concrete for parking areas

4.3.2 Driving Focused Improvements

Each of the items below occurs at specific locations in the roadway study area (see Figure 4.4):

- adjusted striping and regulatory signage
- narrowed lanes (10' left turn and 11' through lanes) for traffic calming and accommodations needed in the right of way to fit other improvements (note: 11' left turn lanes and 12' through lanes may be required based on truck traffic volumes)
- consideration of "Round-a-bouts" at Third and 4th Avenue, depending on ROW and volume constraints
- planted medians at intersections and at all proposed new mid-block crossings, depending on further analysis of driveway requirements, U-turn capabilities and other street geometry issues

4.3.3 Walking and Streetscape Improvements

The north and south side streetscapes proposed on Main Street, will consist of street design improvements for the public within the public right-of-way areas. The design elements will need to comply with the City of Chula Vista's Street and Landscape Standards. A number of street design improvements were discussed and vetted through the community process. The top ten streetscape elements listed in order of priority were:

- 1) continuous sidewalks,
- 2) marked crosswalks,
- 3) improved lighting,
- 4) designated bike lanes
- 5) controlled or protected crosswalks,
- 6) bus shelters with benches,
- 7) shade trees along walkways,
- 8) on-street parallel parking,
- 9) directional signage, and
- 10) planted parkways.

All streetscapes would include a continuous pedestrian walkway, parkway and median planting with palms, trees and shrub and groundcover that will allow stronger visual connections to the adjacent community, Otay Regional Park, and the Bayfront area.

In addition, there were a number of other items discussed and utilized in the streetscape master plan including:

- pedestrian level and vehicular lighting
- interpretive signage for the Otay Valley Regional Park linkages
- introduction of a planted parkway, which ranges from 5' to 15' in width
- introduction of street trees
- introduction of native / drought tolerant plantings
- district markers expressed as paving at Broadway and Del Monte Avenue
- enhanced paving and river based design treatments across the roadway surface at a new midblock crossing proposed where a Otay River feeder tributary located at the east end in the River District

4.3.4 Bicycle Focused Improvements

Each of the items below occurs throughout the entire roadway study area:

- introduction of a 2' striped door zone buffer that creates an overall 7' wide striped bike lane (Class 2 Bike lane) on WB Main St

- where the ROW allows, the introduction of a 3' striped door zone buffer along with a 4' striped bike lane (Class 2 Bike lane) on EB Main St.
- introduction of a 6' striped bike lane (Class 2 Bike lane) with no buffer on WB Main St.
- introduction of a 6' striped bike lane (Class 2 Bike lane) on EB Main St.
- introduction of Sharrows (Class 3 bike lane)
- use of painted Stencils (Class 2 & Class 3 sharrows)
- inclusion of new bike related signage such as MUTCD D11-1, R81 (CA), R4-11. (refer to Fig. 4.5 this page)

4.3.5 Transit Focused Improvements

Although MTS is often reluctant to provide site amenities to their station stops, they do allow the local municipality to propose (and maintain) enhanced bus stops. A future BRT or rapid bus system is proposed through the area and as a minimum, include the improvements listed below. Dependent upon future improvements recommended by MTS and SANDAG, transit bus stops should be considered for the following improvements:

- shelters
- signage
- trash receptacles
- wayfinding signage
- enhanced paving
- seating
- landscaping
- pedestrian scale lighting
- information kiosks
- graffiti resistant paint finishes

Fig. 4.5: MUTCD Signage





4.4 Progress Meeting #2

After receiving input at Progress Meeting #1, the recommendations were refined and evolved into various schematic alternatives that were developed to establish a street theme and identity for the corridor. Some of the refinements were for design related issues while others were for the roadway geometry and circulation elements.

The intent of the alternatives was to give consideration to accentuating visual points of interest, preserving the historic character of certain areas, to linking multiple pedestrian areas to residential neighborhoods and businesses, to identify focal points, and to accommodate multiple modes of transportation.

The following pages show exhibits that were developed in plan and section and were illustrated to convey the intent of the design alternatives.



### MAIN STREET MASTER PLAN

#### Progress Meeting #2

at the Otay Recreation Center  
3554 Main Street, Chula Vista, CA 91911  
on Thursday November 7, 2013









#### SCHEDULE

6:00 - 6:30 p.m. Presentation by City Staff and Consultants  
6:30 - 8:00 p.m. Design Workshop and Discussion

Learn about the public input provided at Progress Meeting #1.  
See the three preliminary design alternatives for Main Street.

#### ACTIVITIES

Come to provide your input on the three alternatives that show the following elements:

- Vision, identity, and themes for Main Street
- Option for bike & pedestrian mobility and safety
- Aesthetically pleasing & environmentally sound landscaping
- Connection to Otay Valley Regional Park and other points of interest.

For more information, please contact: Patricia Fermán, City of Chula Vista, email: [pferman@chulavistaca.gov](mailto:pferman@chulavistaca.gov)



### PLAN MAESTRO PARA LA CALLE MAIN

#### Junta Pública #2

Centro Recreativo de Otay  
3554 Main Street, Chula Vista, CA 91911  
Jueves Noviembre 7, 2013









#### HORARIO/AGENDA

6:00 - 6:30 p.m. Presentación del personal de la Ciudad y los Consultores  
6:30 - 8:00 p.m. Taller de diseño y discusión

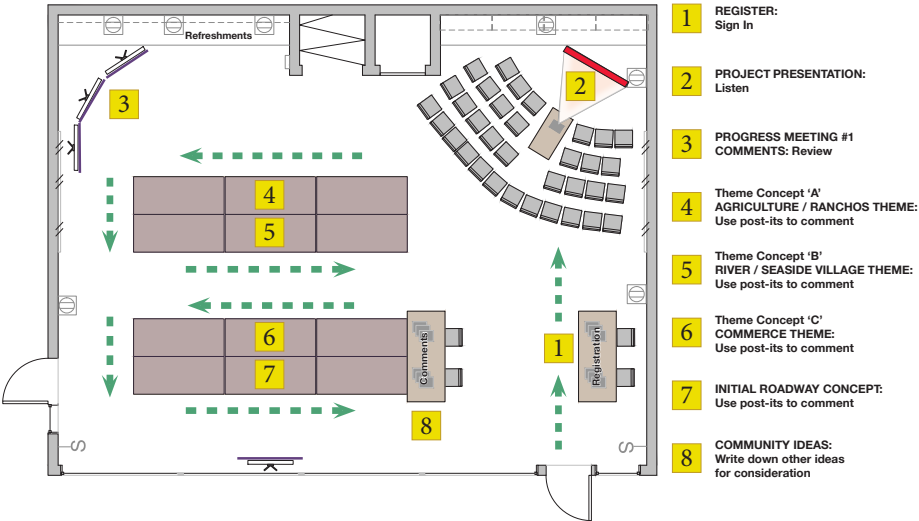
Infórmese acerca de las opiniones recibidas durante la Junta Pública #1.  
Vea y opine sobre las tres alternativas preliminares para la Calle Main.


#### ACTIVIDADES

Venga a dar sus opiniones sobre las tres alternativas que incluyen los siguientes elementos:

- Visión, identidad, y tema para la Calle Main
- Opciones más seguras para los peatones y ciclistas
- Jardinerías más agradables estéticamente y efectivas ecológicamente
- Mejores conexiones con el Parque Regional del Valley Otay y otros puntos de interés


Para más información, favor de ponerse en contacto con Patricia Fermán de la Ciudad de Chula Vista en [pferman@chulavistaca.gov](mailto:pferman@chulavistaca.gov)





### MAIN STREET MASTER PLAN

#### Progress Meeting #2 : Sign In Sheet



NAME	AFFILIATION (Resident, Organization, Business Owner, etc.)	Contact Information for Future Meetings (Please provide at least one)		
		PHONE	ADDRESS	EMAIL
BRUNN LIGHTBODY				
Kristi Carlson				
DAN ROSENBERG				
DJ TAYLOR				
Crystal Fairley				
Lisbet Street				
J.S. Haley				



# MAIN STREET MASTER PLAN Progress Meeting #2



NOVEMBER 7, 2013

## What we will Accomplish Tonight

- Present workshop survey findings and results to Community
- Present alternative concepts to the community
- Document and record all input and ideas from community
- Develop selected Conceptual Plan inclusive of:
  - ✓ Corridor theme with points of interest.
  - ✓ Streetscape design
  - ✓ Bike and pedestrian mobility concepts
  - ✓ Harmonizing elements & unique treatments
  - ✓ Plans, cross sections, sample images & 3D concept graphics

## What we Hope to Accomplish in December

### PRESENTATION TO COMMUNITY

- Present selected conceptual plan to the community
- Document and record any final input from community

### PREPARATION OF FINAL CONCEPTUAL DESIGN

- Develop final conceptual plan package inclusive of:
  - ✓ Corridor theme with points of interest
  - ✓ Streetscape design
  - ✓ Bike and pedestrian mobility concepts
  - ✓ Harmonizing elements & unique treatments
  - ✓ Plans, cross sections, sample images & 3D concept graphics

## Agriculture Theme “A”



## River / Seaside Village Theme “B”



## Commerce Theme “C”



## Initial Roadway Concept Segment 1 of 4



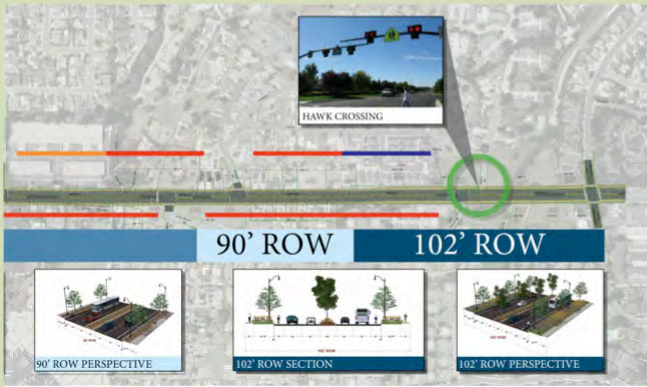
## Initial Roadway Concept Segment 2 of 4



## Initial Roadway Concept Segment 3 of 4



## Initial Roadway Concept Segment 4 of 4

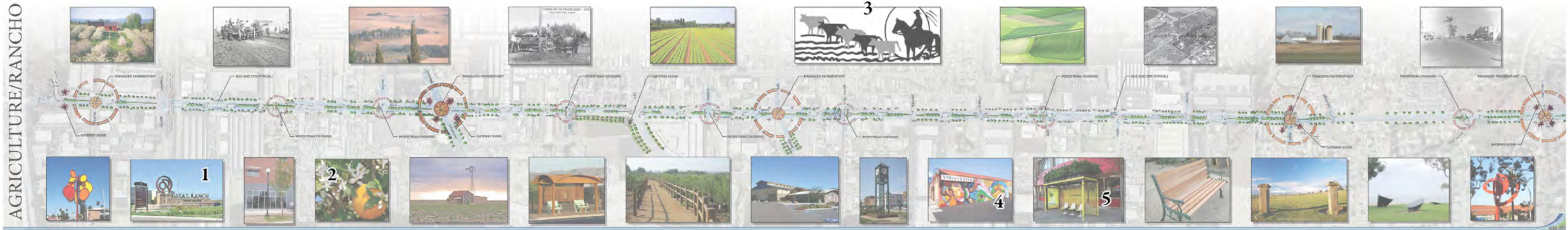




# AGRICULTURE / RANCHOS THEME (*Progress Mtg. #2 Comments*)

Check if Main Street is Chula Vista's only truck route. Just asking.

Informational signage telling about Chula Vista's agricultural history.



- 1) Something like this but with Main St.
- 2) Should be some real fruit trees.
- 3) This is nice, reminds me of the history of farms in the area.
- 4) I would encourage art
- 5) Bus shelters concern me as somewhere for graffiti & unsafe activities

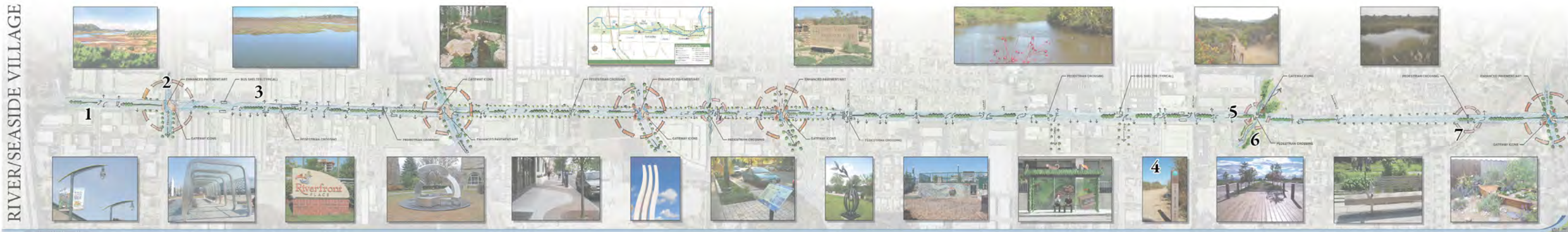


RIVER / SEASIDE VILLAGE THEME (Progress Mtg. #2 Comments)

Like this concept best - change to River / Bayside

Main St. is a place where people & trucks go for a purpose. So it seems to me that the use of street furniture & extensive art is a waste. People don't come to congregate & mill around.

A demonstration garden would be nice, maybe Southwestern College would maintain it.



1) Work on traffic / bike lane transition at this area. Understand must work with Caltrans / City of SD. All concepts. Bikelane at I-5 & Main St.

2) Conceptually nice, thoughtful. Hopeful for a better, more productive neighborhood for families.  
3) Keep bus stop out of traffic lanes - all concepts.

4) Let people know Otay Valley Regional Park is nearby. It's a 'best kept secret'.

5) This is a good image, ties Otay Valley Regional Park to Main St.  
6) Site for future 97 unit apartment project. Stone Creek Casitas 2014-15

7) Good place for a crossing.

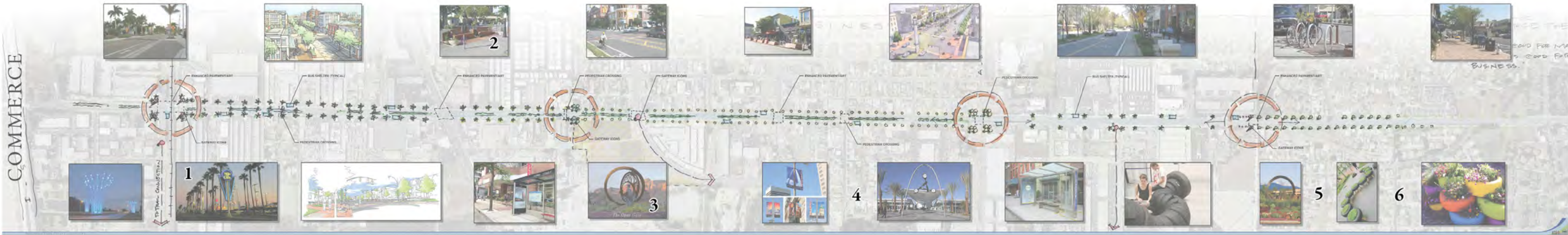


# COMMERCE THEME *(Progress Mtg. #2 Comments)*

This Commerce concept seems more practical.

This concept is great. It would make the existing businesses look good!!

With any of the concepts - explore reclaimed water & native / drought tolerant plants / trees. Otay Municipal Water District has a reclaimed system (x2)



1) I forgot about this, but I really like it.

2) Really nice! Looks very good & has green.

3) Even something like this is nice.

4) Not to be negative, but I love the art, but worry about vandals. Maybe it will give a sense of pride.

5) Concern: I like the idea of using trees & vegetation to enhance, but where is funding coming from?

6) Using tires as decoration is a great idea. Like the red geranium.



INITIAL ROADWAY CONCEPT (Progress Mtg. #2 Comments)



- 1) Good place for a crossing.
- 2) Going from 4 lanes to only 2 lanes is going to cause traffic congestion.
- 3) It would be nice to have a roundabout.
- 4) Roundabout? Not good.
- 5) Constant flow of vehicles downstream of roundabout makes it hard to reverse out. Maybe start diagonal parking further east.
- 6) Angled parking with the bike lanes. What is/are safety factors for bicyclists with cars backing out?



After receiving input at the second Progress Meeting, the Design Team worked closely with City staff to develop the Conceptual Street Design Plan, including colored plans, 3d roadway constructions of the design concepts, along with a narrative, and recommendations.

4.5 Refined Design Concept

Progress Meeting #3 provided the setting for obtaining further input on the refined Design Concepts. Unlike the previous concepts that were treated as alternatives, this effort was based on refinements to the selected street geometry and selected design themes. This effort provided a single theme for the three mile length of Main Street, becoming more specific to different segments of the roadway and the proposed nature of the improvements.

4.5.1 Proposed Conceptual Design Districts

The proposed design districts evolved throughout the duration of the study. Their final configuration and naming are shown on *Figures 4.6 A-C*. These figures show the locations, character and elements proposed for district entry gateways, as well as other district design elements.

4.5.2 Proposed Circulation Concepts

The proposed circulation improvements also evolved throughout the process of this planning effort. The refined conceptual layout of circulation elements can be seen on *Figures 4.7*.

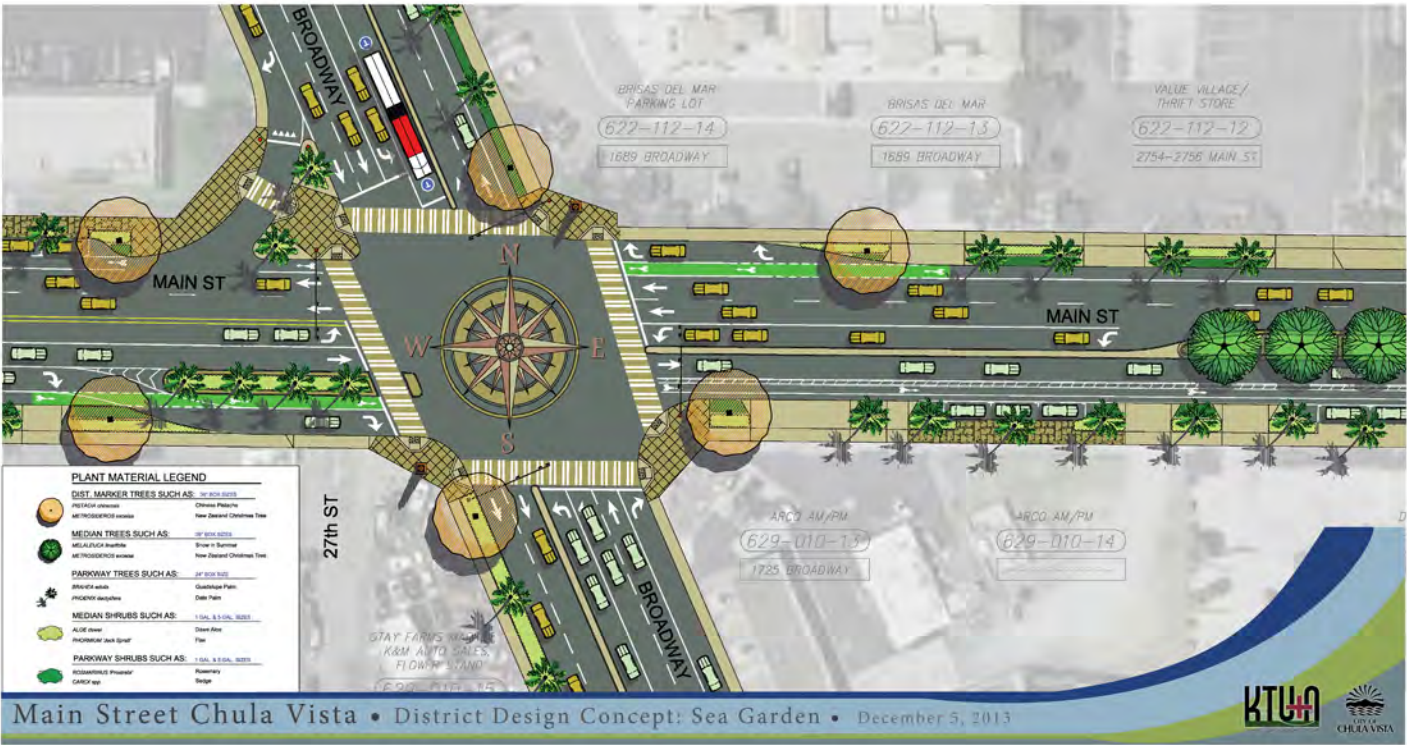


Fig. 4.6-A: Sea Garden District

Fig. 4.6-C: River District

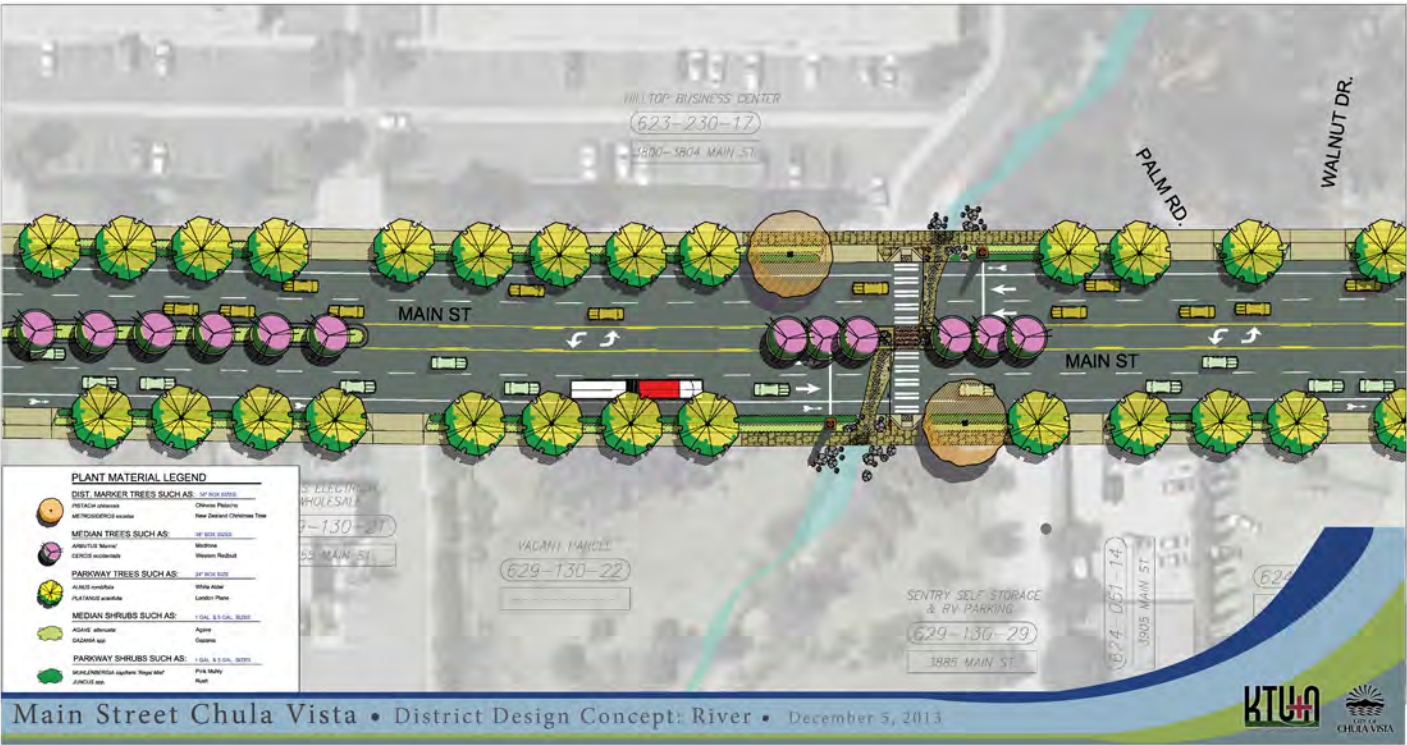


Fig. 4.6-B: Agriculture / Rancho District

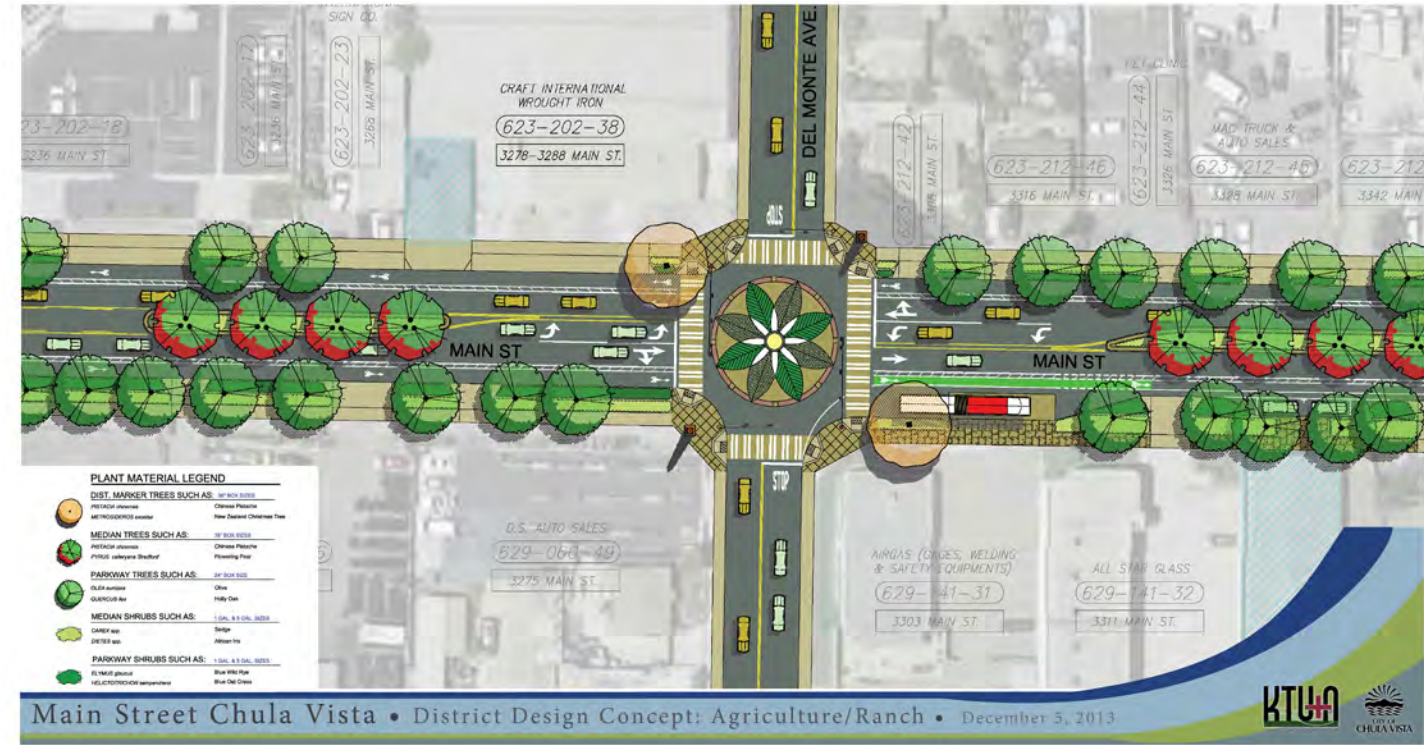
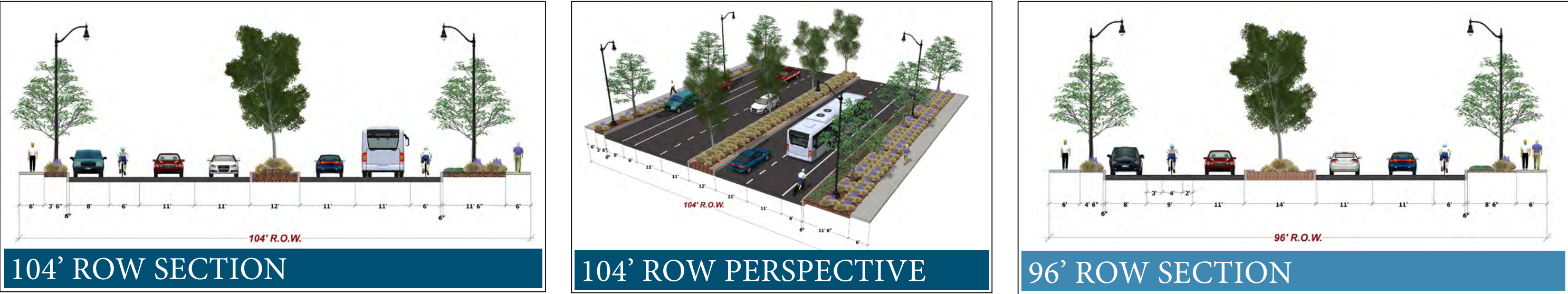


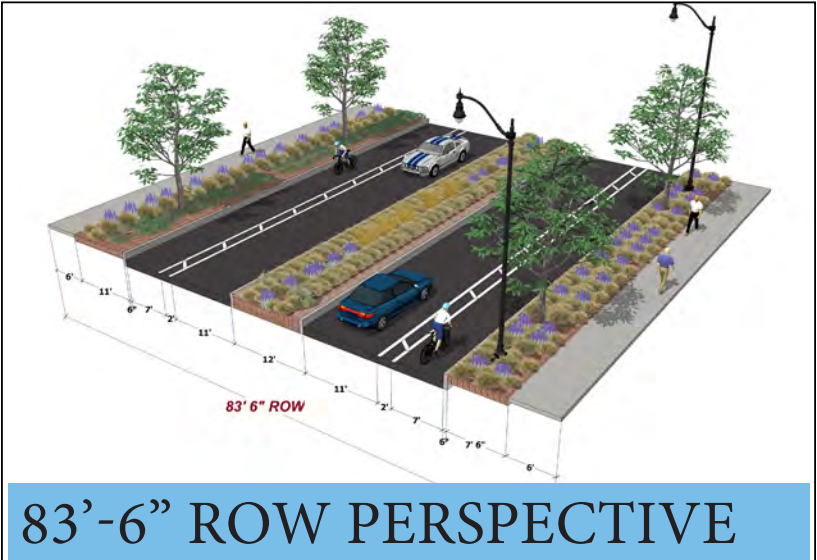
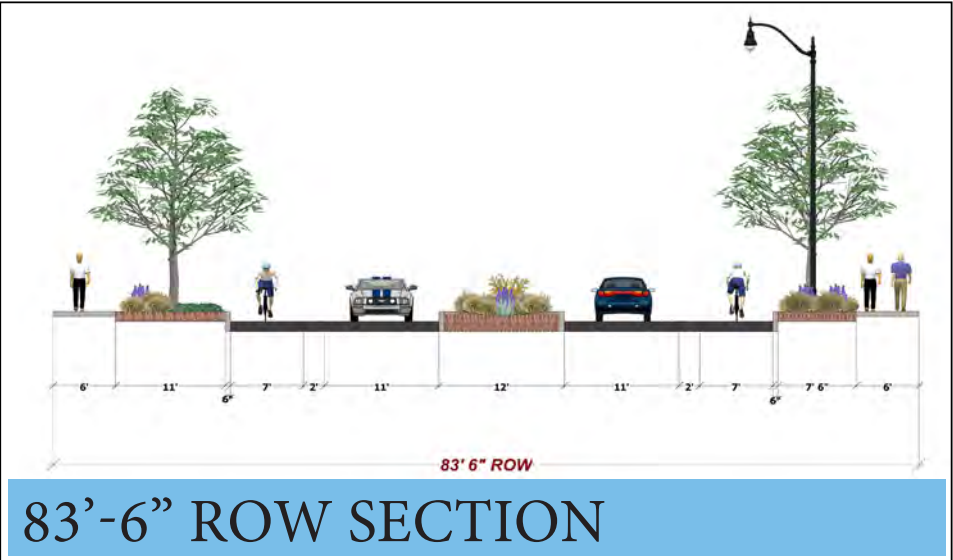
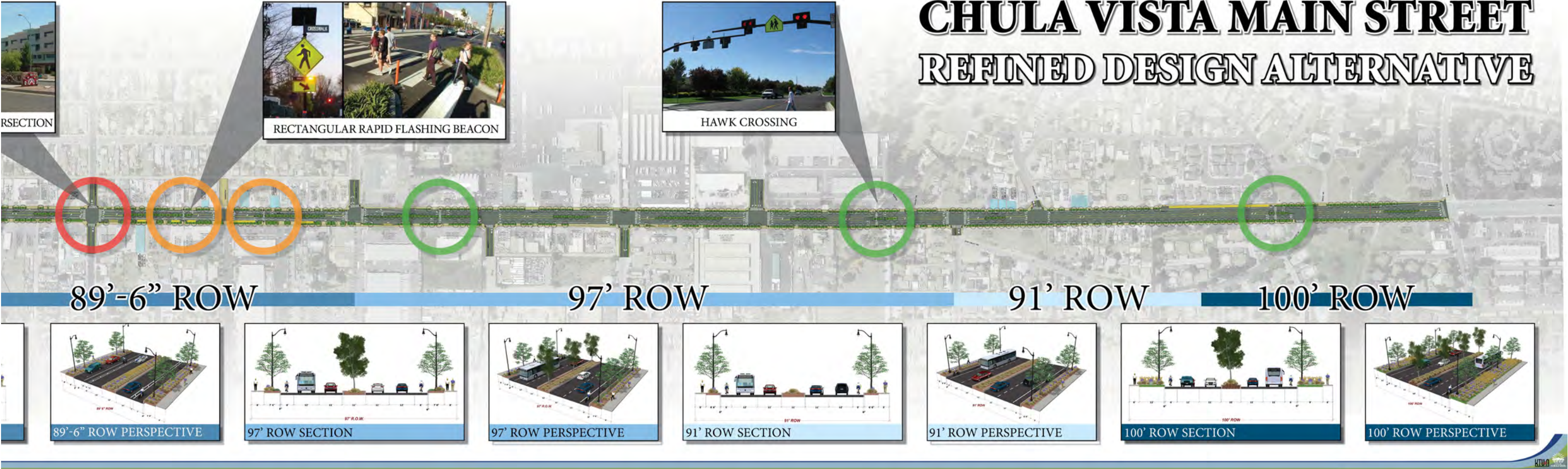




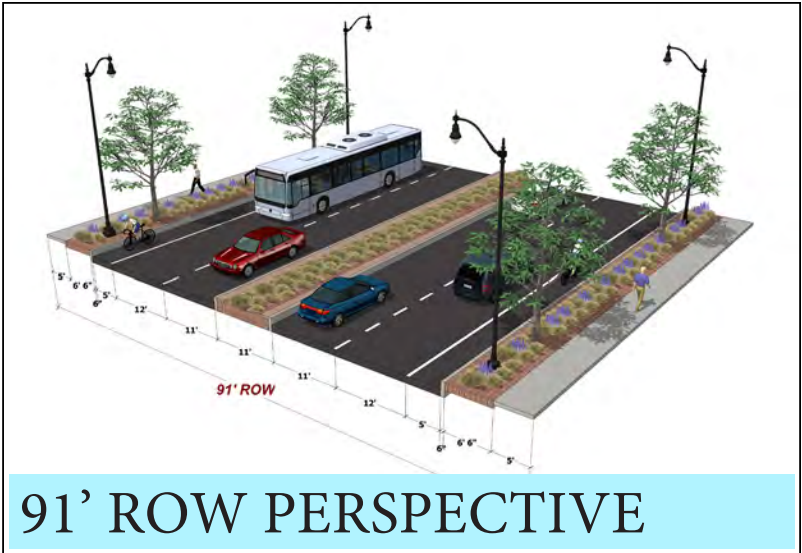
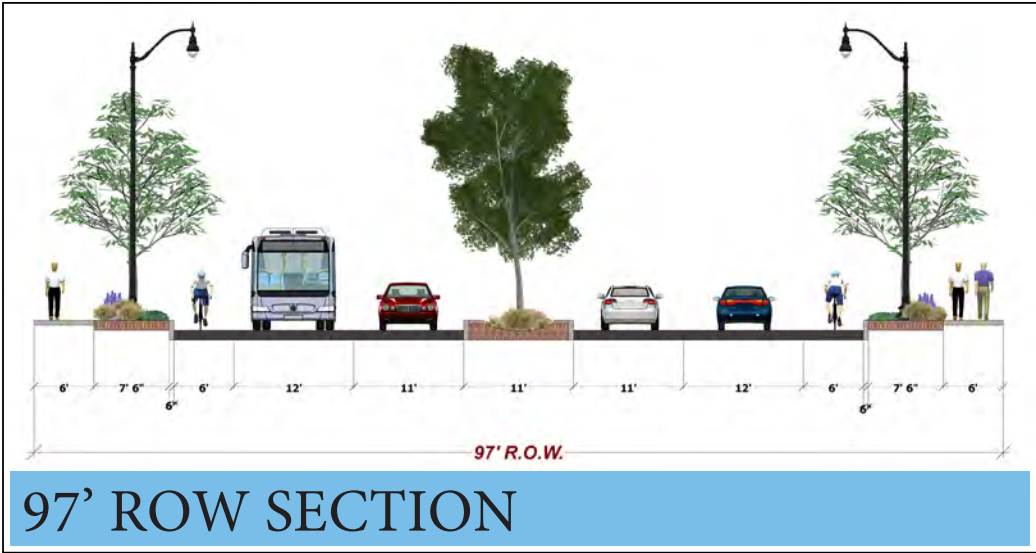
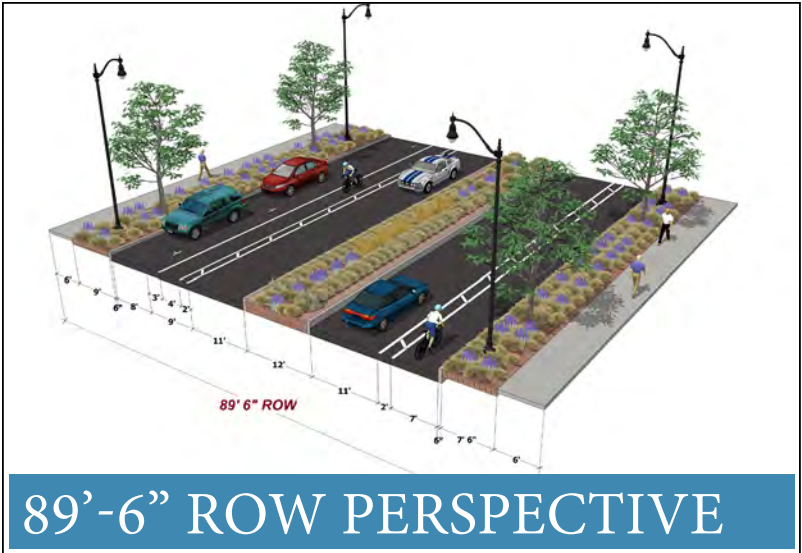
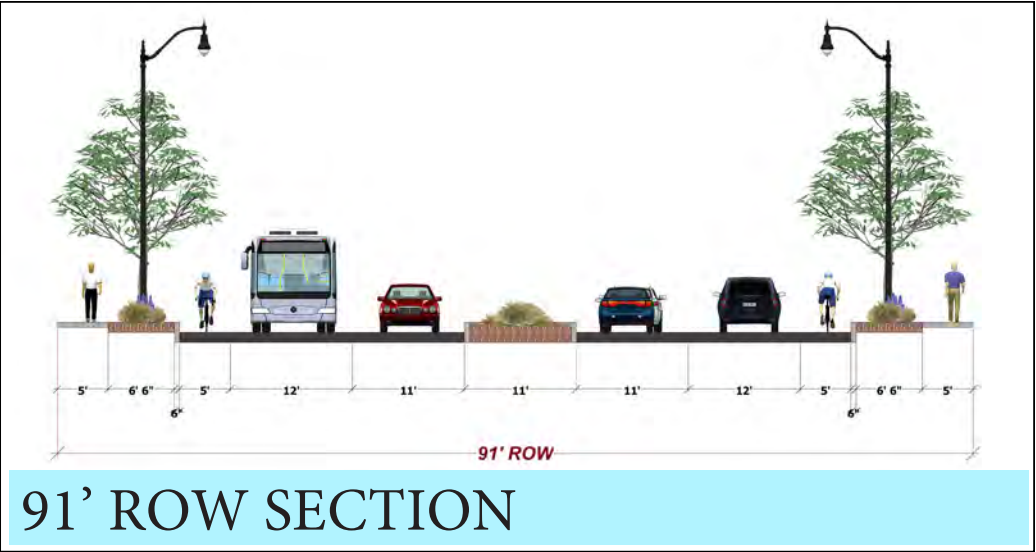
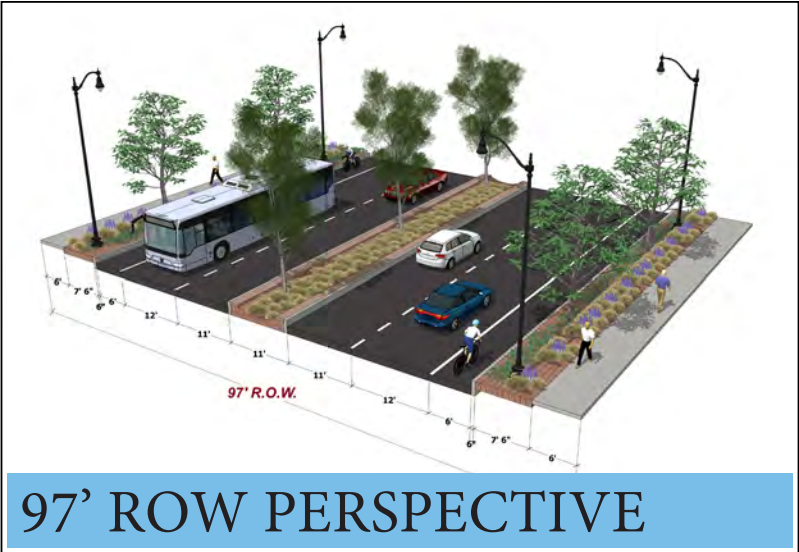
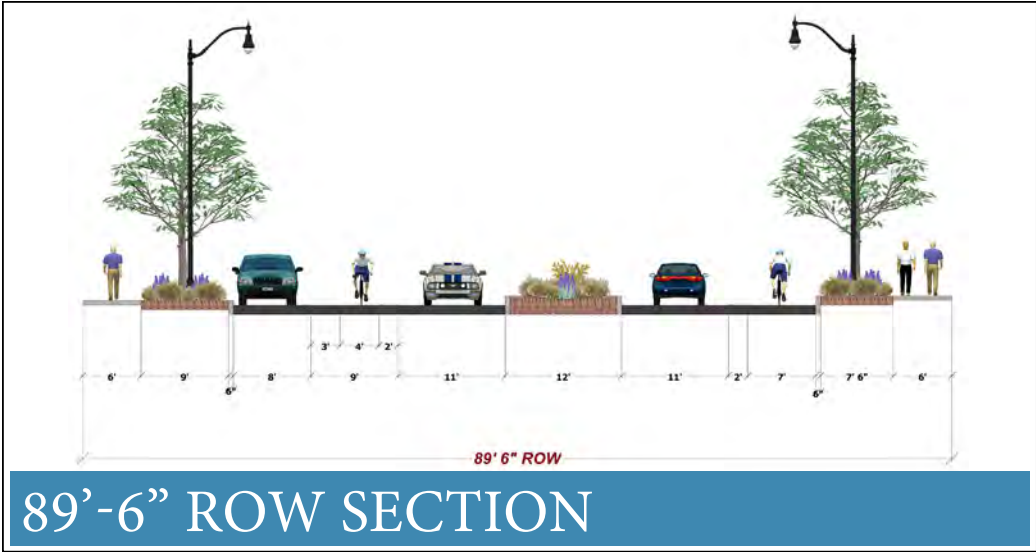
Fig. 4.7 Refined Circulation and Design Concept





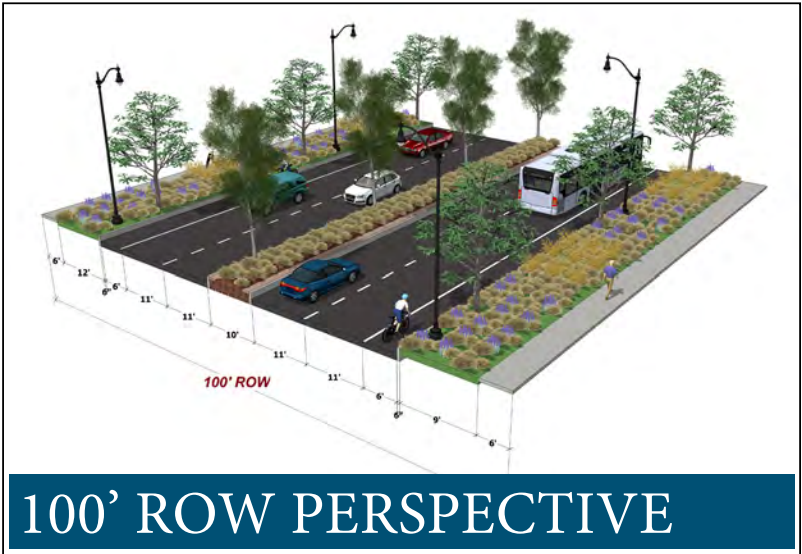
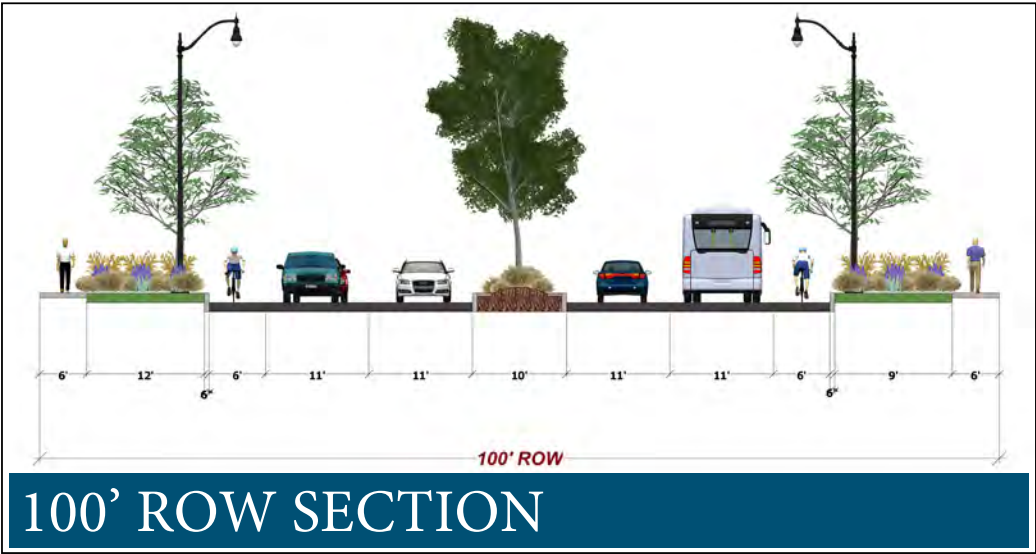






4.8 Cross Sections and Perspectives showing the Design Concept

The enlarged sections and perspectives (Figure 4.8) on this page better show the detail of those presented on the Refined Design Concept Figure 4.7.





4.6 Progress Meeting #3

After gaining input from Progress Meeting #2 on the initial concepts presented on the previous pages, the following refined concepts, themes and plans were presented in Progress Meeting #3. By presenting these more refined concepts, the design team was able to obtain final input before the design vision was completed.



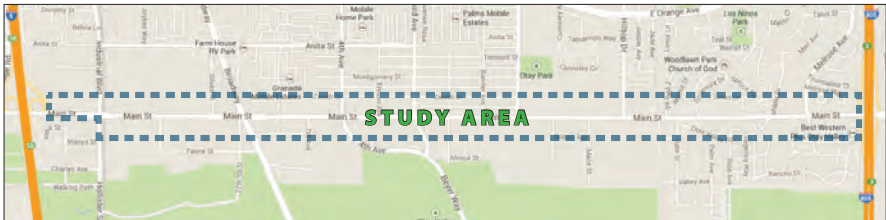
Dear Main Street Property Owner:

The City of Chula Vista invites you to participate in our upcoming efforts to improve the public right-of-way along Main Street and neighboring streets between I-5 and I-805 through the development of a "Streetscape Master Plan" for the area.

As the owner of a property fronting on Main Street, the City wants to ensure that your ideas and priorities for the district are included in this Streetscape Plan. On Thursday December 5th, the City plans to hold a progress meeting to gather input for the master plan. The meeting is scheduled from 6-8 pm at the Otay Recreation Center, 3554 Main Street, Chula Vista, CA 91911. We hope you will attend. Please see and share the attached flyer.



NAME	AFFILIATION (Resident, Organization, Business Owner, etc.)	Contact Information for Future Meetings (Please provide at least one)		
		PHONE	ADDRESS	EMAIL
Kosa Gibson	Resident/SWB			
Kevin Marshall	Business owner			
GUILLERMO CAMARENO	PROPERTY OWNER			
Cheryl Perkins	Property owner			
Allison Sapp	UT - San Diego			
David Lorie Leaf	Business owner			
Annie Leaf	Farmer			
David Street	Business owner			
Steve + Margaret Hagan	Property owner			
DAN ROSENBERG	Property owner			
Randy Vavrick	BIKE/WALK C.V.			
Suchi Mukherjee	SANDAG			
Eric Estrada	Santa Fe Meats Bike/Walk C.V.			



**SCHEDULE**

6:00 - 6:30 p.m. Presentation by City Staff and Consultants

6:30 - 8:00 p.m. Design Workshop and Discussion

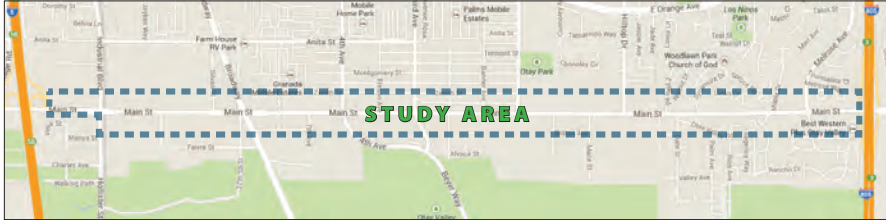
Learn about the public input provided at Progress Meeting #2. See the refined design alternative for Main Street.

For more information, please contact: Patricia Fermán, City of Chula Vista, email: [pferman@chulavista.gov](mailto:pferman@chulavista.gov)

**ACTIVITIES**

Come to provide your input on the final alternative that shows the following elements:

- Vision, identity, and themes for Main Street
- Bike & pedestrian mobility and safety
- Aesthetically pleasing & environmentally sound landscaping
- Connection to Otay Valley Regional Park and other points of interest.



**HORARIO/AGENDA**

6:00 - 6:30 p.m. Presentación del personal de la Ciudad y equipo de diseñadores

6:30 - 8:00 p.m. Taller de diseño y discusión

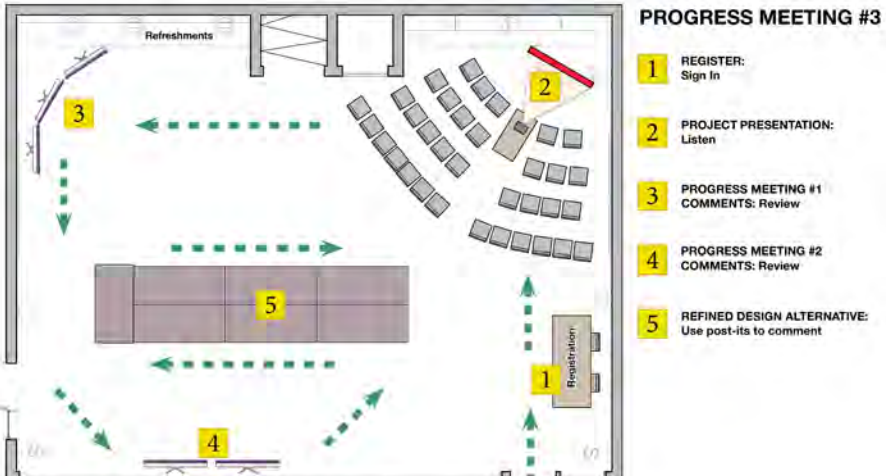
Infórmese acerca de las opiniones recibidas durante la Junta Pública #2; Vea y opine sobre la versión refinada de diseño para la Calle Main.

Para más información, favor de ponerse en contacto con Patricia Fermán de la Ciudad de Chula Vista en [pferman@ci.chula-vista.ca.us](mailto:pferman@ci.chula-vista.ca.us)

**ACTIVIDADES**

Venga a dar su opinión sobre la alternativa final que muestra los siguientes elementos:

- Visión, identidad, y temas para la Calle Main
- Movilidad y seguridad para peatones y ciclistas
- Jardinerías más agradables estéticamente y efectivas ecológicamente
- Conexiones con el Parque Regional del Valle Otay y otros puntos de interés





## MAIN STREET MASTER PLAN Progress Meeting #3



DECEMBER 5, 2013

### What we will Accomplish Tonight

- Present Progress Meeting #2 results to Community
- Review final concept with the community
- Document and record all input and ideas from community
- Presenting selected Conceptual Plan inclusive of:
  - ✓ Corridor theme with points of interest.
  - ✓ Streetscape design
  - ✓ Bike and pedestrian mobility concept
  - ✓ Harmonizing elements & treatment
  - ✓ Plans, images & 3D concept graphics





# REFINED DESIGN ALTERNATIVE - Part 1 (Progress Mtg. #3 Comments)

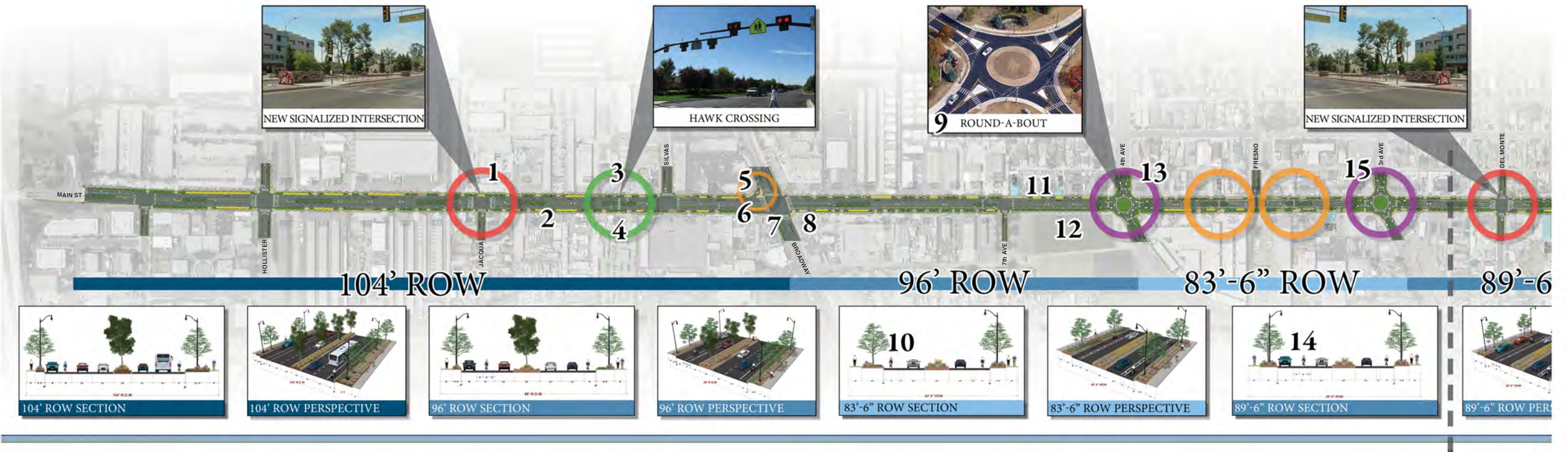
- 1) Very good, safer for pedestrians

2) Island in front of Santa Fe Meats will block entrance. (Eric Estrada)
- 5) Get rid of the yield on the right turn. Takes away R.O.W. from pedestrians, put stop sign instead.

6) Need 2 lanes going east for eliminating traffic back-up. Area plan needs to consider trucks & trailers. Why do pedestrians get walks?
- 9) Roundabouts are not practical in this area.

10) I love the 7' bike lane w/ 2' buffer.
- 13) Keep the roundabouts. Design them in a way that allow trucks to drive over them.

14) 5' bike lane looks good.



- 3) No island in middle of Main St. in front of 2585 Main, Leaf Sales Inc. (David Leaf)

4) BJ Reynolds Trucks etc
- 7) A good idea.

8) Why have pedestrian improvements in truck business areas? 100% of their business don't walk to their business!  
Untrue public comment: people walk to bus stops, schools, businesses and the very Rec. Center that we're standing at now.
- 11) Oversized rigs

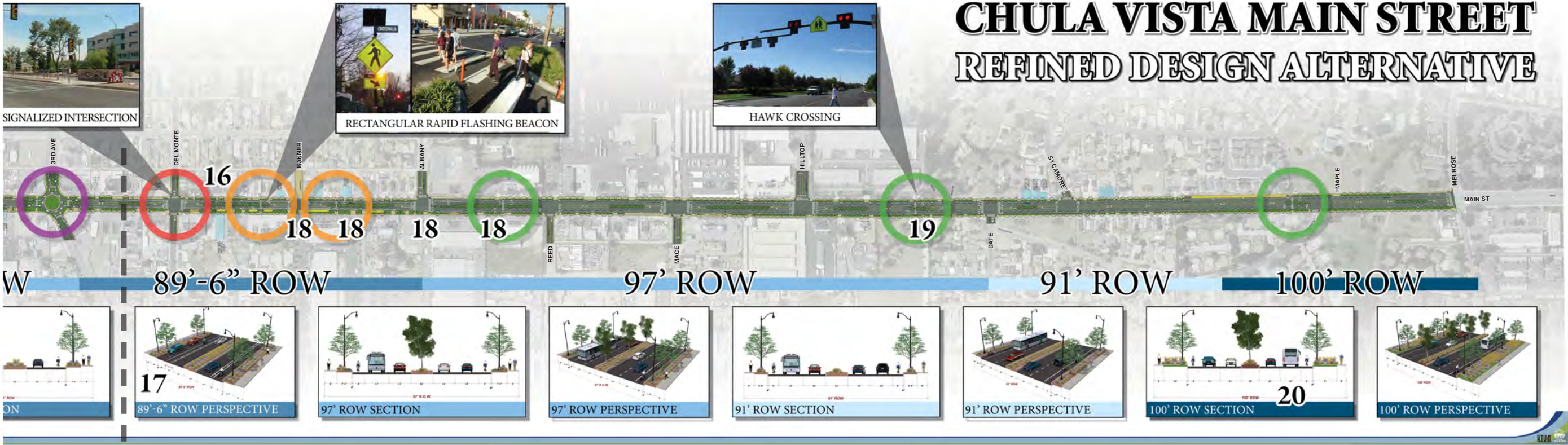
12) Recognize the historic Strawberry Fields w/ art.  
Historic.  
See Ken Kramer's 'About San Diego' episode about this field.
- 15) Roundabouts nice for Bird Rock, but NOT for here. Traffic will be an issue.



REFINED DESIGN ALTERNATIVE - Part 2 (Progress Mtg. #3 Comments)

Progress Meeting #3  
Public Input Comments  
Responses from attendees on exhibit-  
its presented

16) Increase street parking.



17) I like the painted buffers. The more buffers, the better. Consider pylon posts.

18) Double trailer access required. (Kevin Marshall)

19) Looks good.

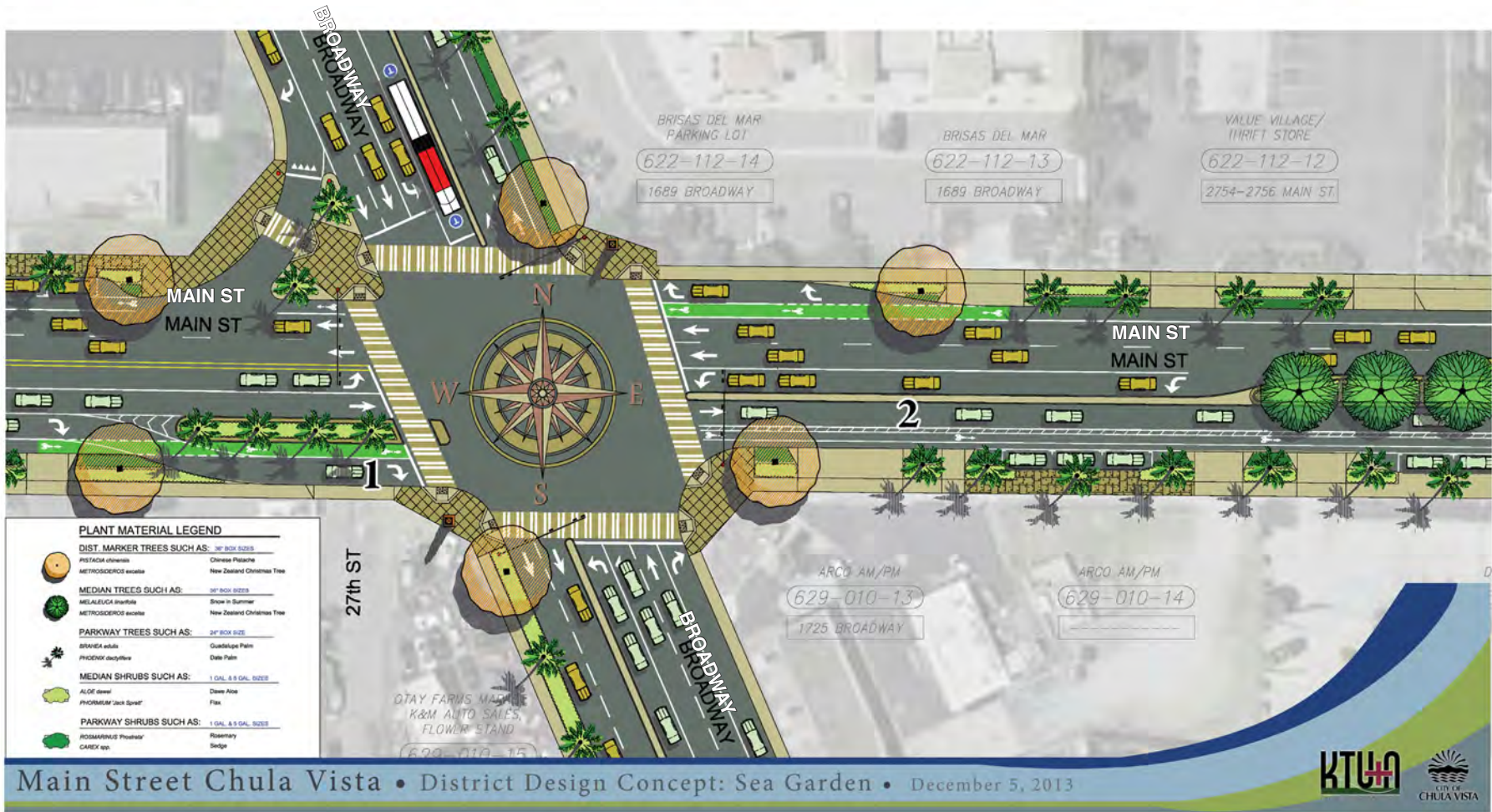
20) 11' wide lanes are TOO narrow for 12' wide loads. Safety issues.



# SEA GARDEN District Design Concept (Progress Mtg. #3 Comments)



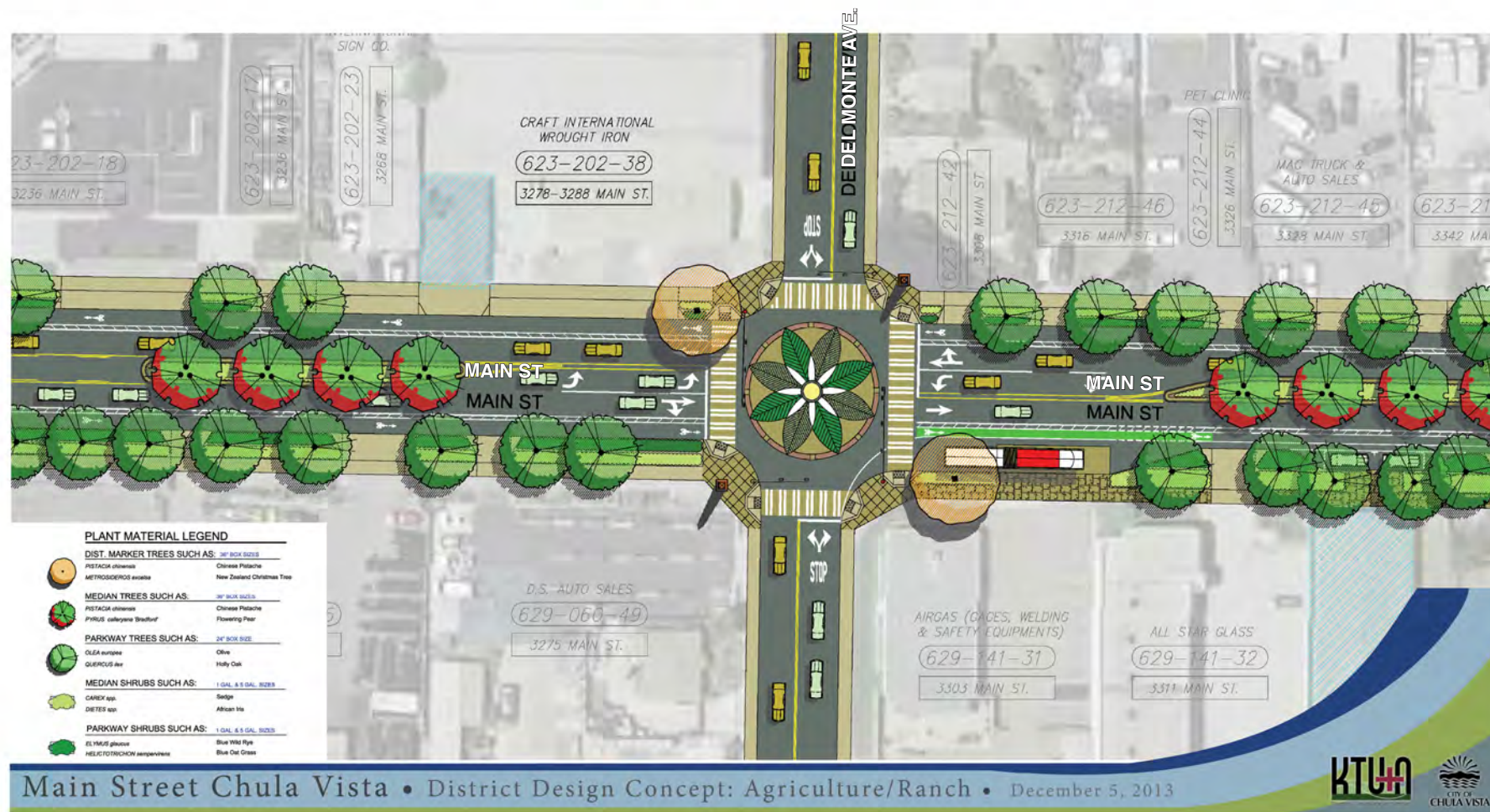
- 1) This lane will back up traffic.  
Eliminate landscape medians.
- 2) One directional lane going east is dangerous, considering the zoning (IL/CT) and car trips (26,000 ADT)



Accentuate greenery at freeways and main intersections (Broadway, etc.).  
Do not use middle of road for landscape medians.



# AGRICULTURE/RANCH District Design Concept (*Progress Mtg. #3 Comments*)



The citrus history is too far in the past. Strawberries are a more near and dear memory. Go with Strawberry theme.

I Agree!

Find one unified theme and use all along the street.

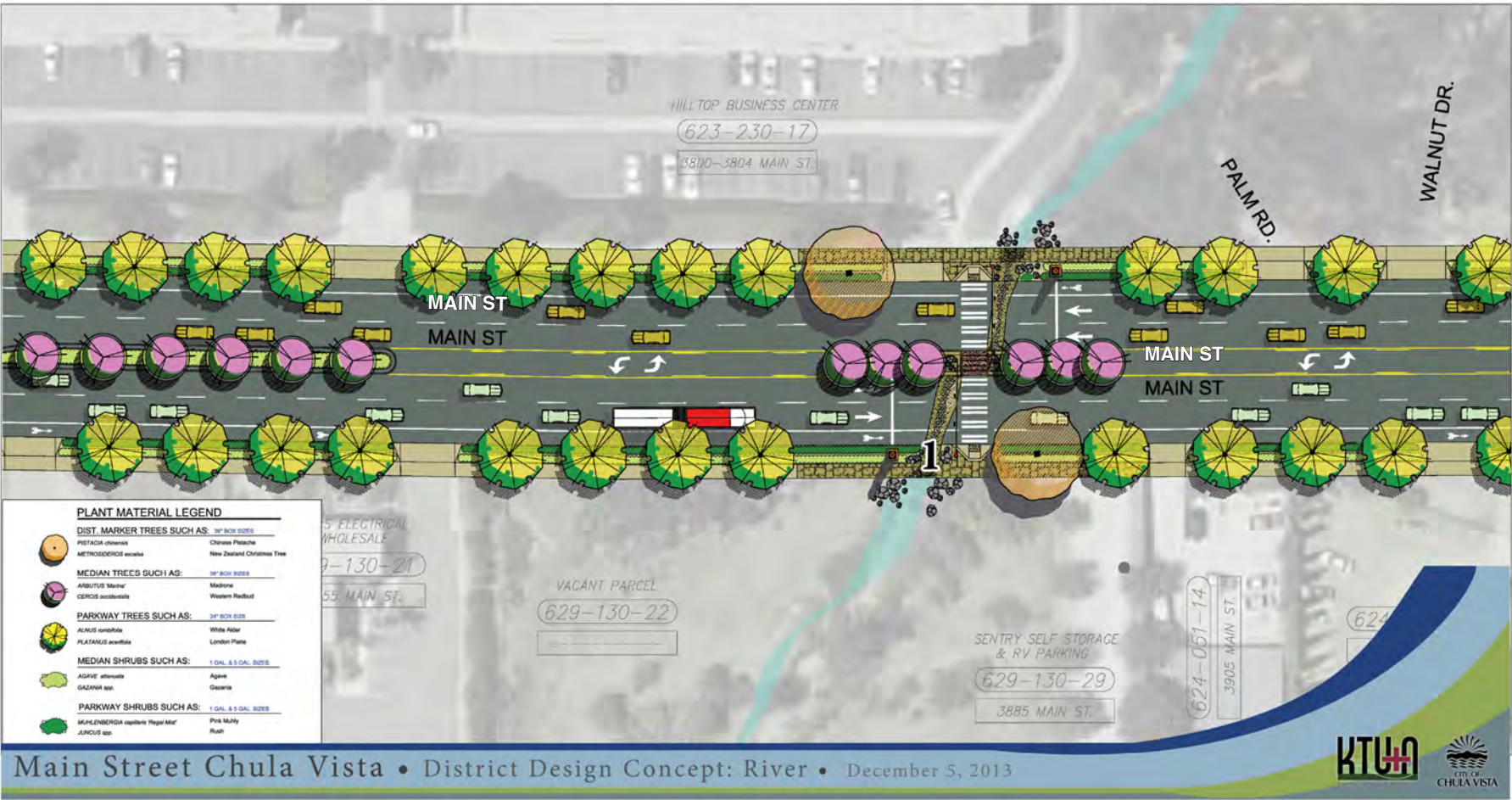
Eliminate Agriculture/Ranch theme.



# RIVER District Design Concept (Progress Mtg. #3 Comments)



1) A great idea!





## Chapter Five:

# FINAL CONCEPTS

### 5.1 Roadway Option “A” (Round-a-bout):

The concept development took the full range of multi-modal uses of the roadway and applied them as a single concept for the entire 3 -mile stretch of roadway (see *Figure 5.1: Roadway Concept “A”*). The recommended plan shows Round-a-bouts, road diets (the reduction of lane widths), protected pedestrian crossings, and striped bicycle facilities. It also included the smoothing out of the exiting right-of-ways by removing the existing jagged edge effect created by various ROW limits already existing in the area. This plan and the flexible ROW cross sections proposed, protect every structure along the 3-mile project boundary. The concept was developed to test the limitations of the corridor and were also based on input from City staff and the Progress Workshops participants.

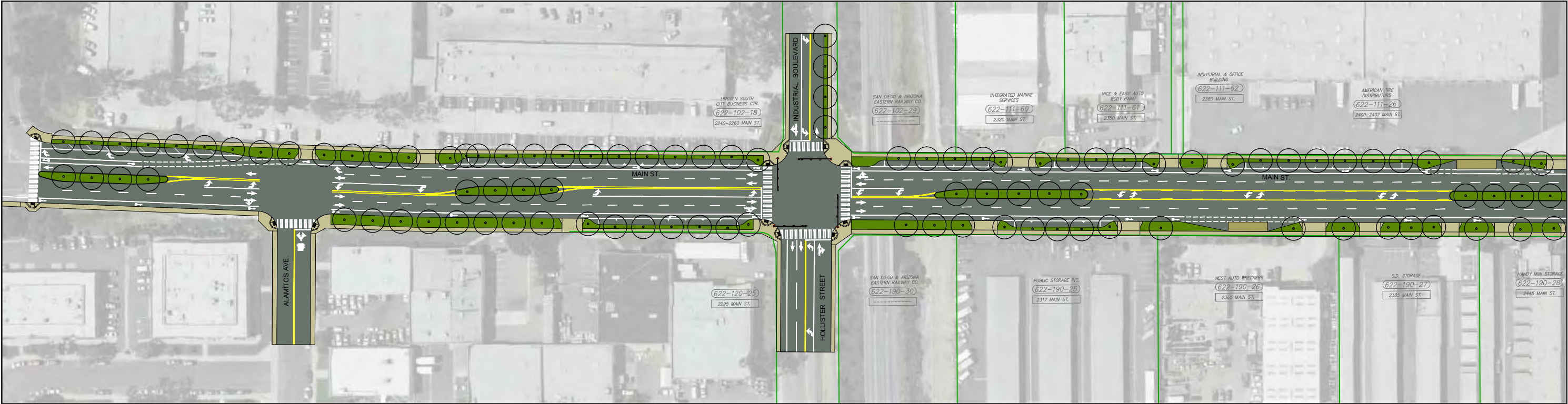
The goal of the final concept is to keep all structures protected from demolition along the entire roadway alignment and reduce the amount of multiple ROWs by simplifying the jagged edge effect. Structures can be saved by allowing certain parcels to be closer to Main Street while other adjacent parcels may be further away from Main Street. Once variable ROWs have been set, the removal of the jagged roadway edge affect is accomplished, by establishing continuity along the whole alignment by using continuous sidewalks, parkways and street trees to create a safer environment for ingress and egress into existing driveways.

The new curb line, though varying along the corridor, will set a more consistent edge and prevent the abrupt start and stop of travel lanes and street end barriers that exist today. The option to have parkway strips with trees or trees in tree grates sharing the walking environment, along with the option for on-street parking or not, will give the needed flexibility to protect structures and front yard uses without keeping the jagged affect that exists now.

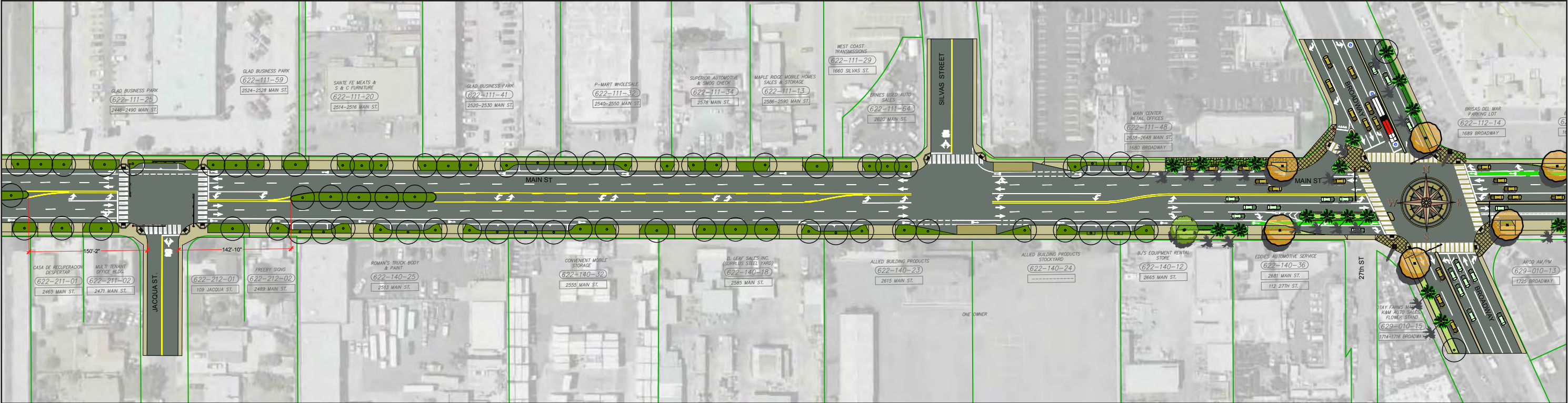
Round-a-bouts are shown as concepts in this plan and that no traffic analysis or R.O.W. review was done with this study to determine the viability/feasibility. Further technical analysis is needed and as such, this study’s purpose was to identify planning level concepts to gauge public interest in Round-a-bouts/traffic circles, not specifically place them at these intersections. Additional traffic studies should be performed for enhanced crosswalks, hawk pedestrian signals, round-a-bouts and other traffic control devices shown on these alternative concepts.

The plans show that all modes have been accommodated in this complete streets plan. Figures 5.2 thru 5.8 show sample isometric plan views and roadway cross-sections with typical dimensions of lanes and uses.



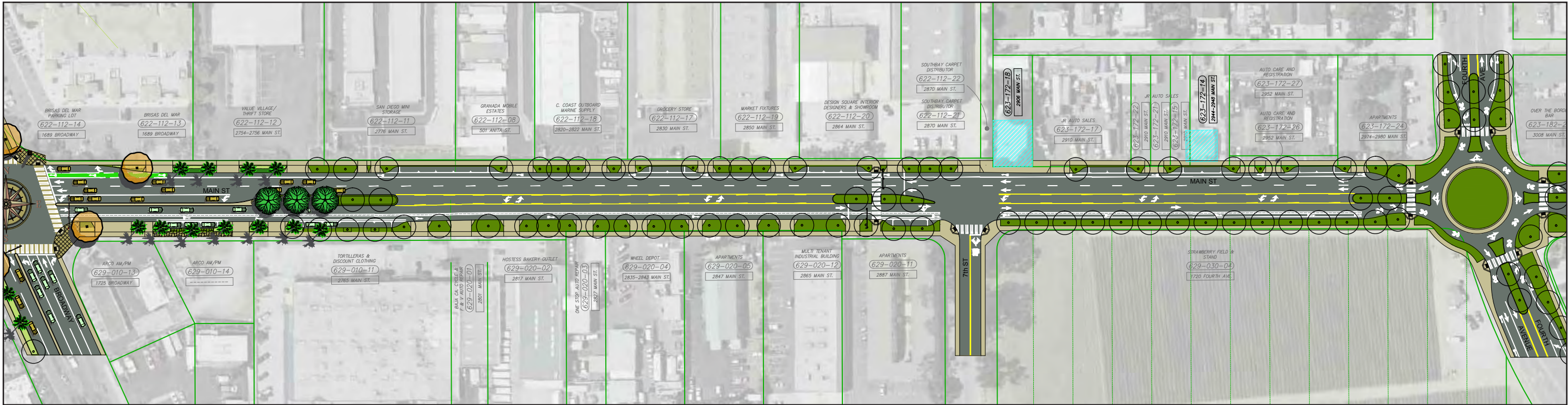


Roadway Concept A - Round-a-bout: Fig. 5.1-A

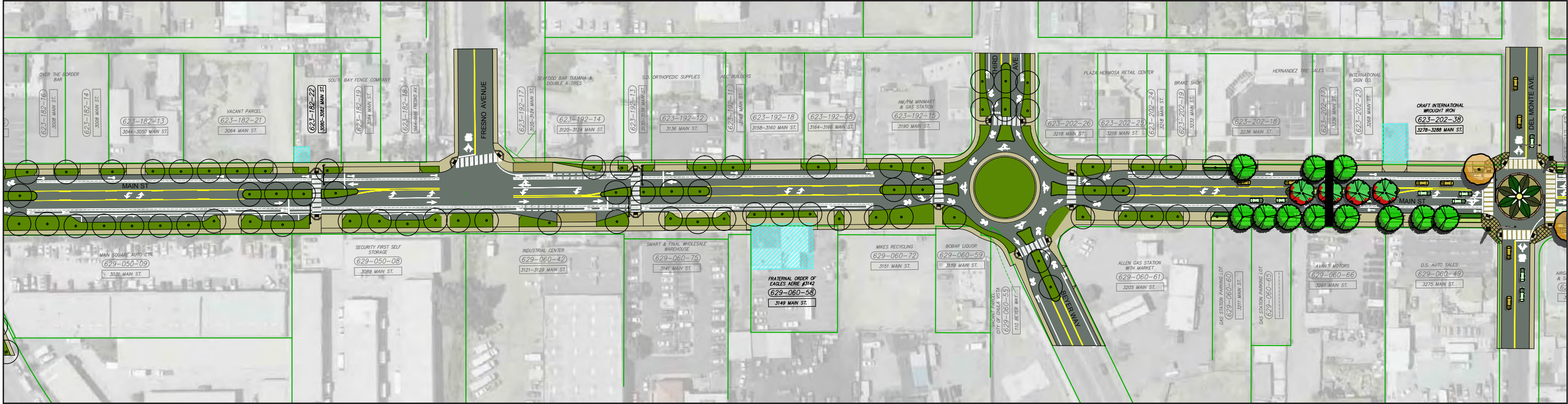


Roadway Concept A - Round-a-bout: Fig. 5.1-B



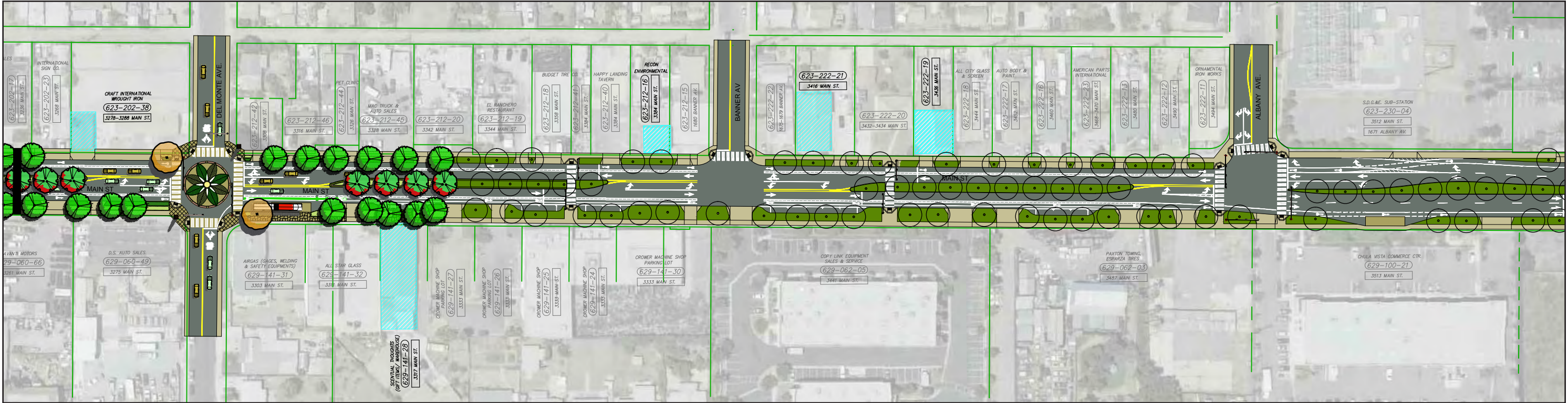


Roadway Concept A - Round-a-bout: Fig. 5.1-C

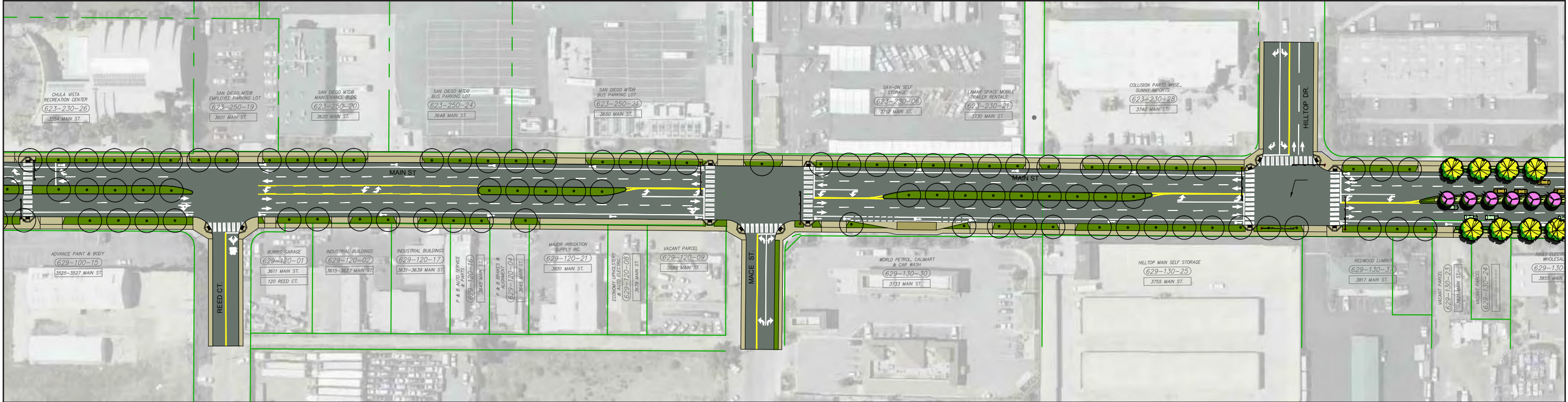


Roadway Concept A - Round-a-bout: Fig. 5.1-D



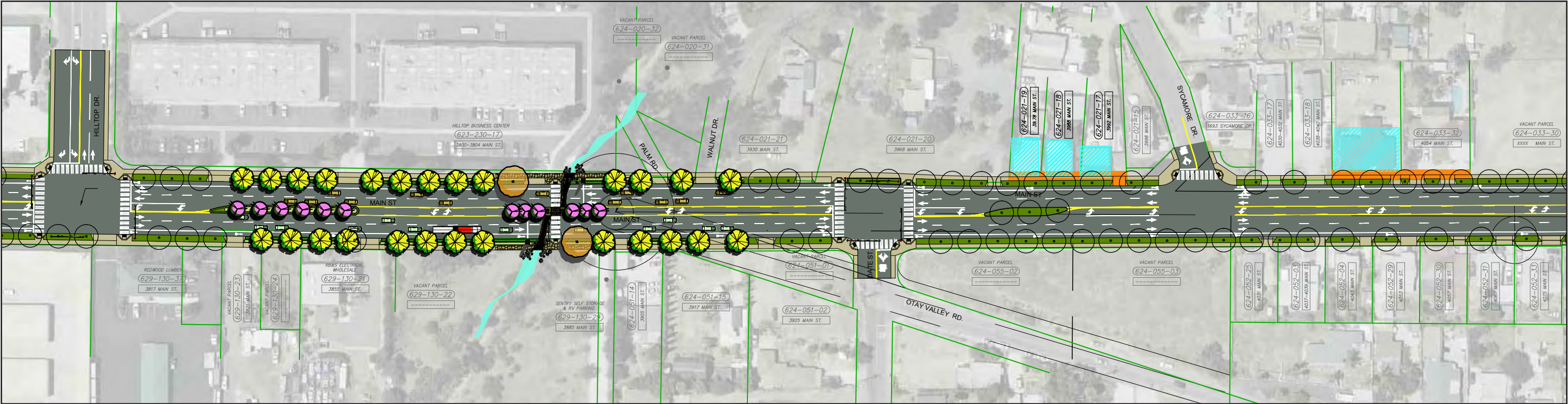


Roadway Concept A - Round-a-bout: Fig. 5.1-E

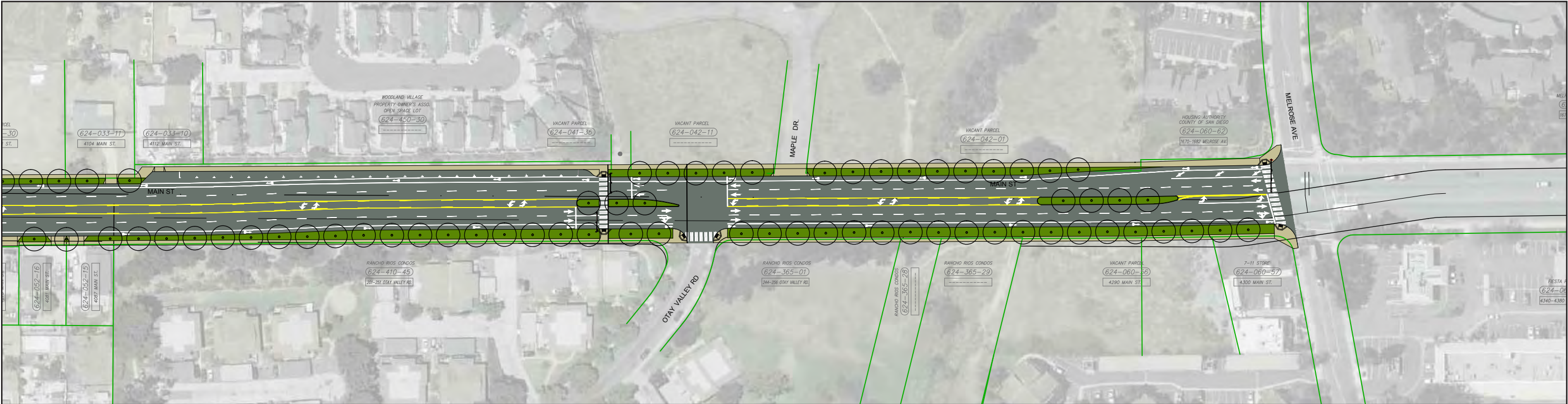


Roadway Concept A - Round-a-bout: Fig. 5.1-F





Roadway Concept A - Round-a-bout: Fig. 5.1-G



Roadway Concept A - Round-a-bout: Fig. 5.1-H



### 5.1.1 Recommended 84' ROW Section from Del Monte Ave. (WB) to Third Ave. (EB)

The proposed improvements along this portion of the corridor include:

- addition of a 12' planted median
- medians located at intersections which help to define the left turn pocket and provide safer pedestrian crossings with the inclusion of a media refuge
- Two-Way Left Turn Lane in the center of the roadway that functions as part of this ROW allowing large vehicles to turn into adjacent properties
- reduction of lane widths to 11' (#1 travel lane) on EB and WB Main Street
- introduction of a 12' planted parkway strip on EB Main Street
- introduction of a 2' striped door zone buffer that encourages cyclists to ride outside of the door zone when buffer is between parked cars and bike lane (NACTO pg.20), this will result in a 9' striped bike lane (Class 2) on EB and WB Main Street
- travel lane and bike lane equal to 20', which is the minimum width for emergency vehicles between raised curbs and medians on EB & WB Main Street
- retention of the 8' parallel parking in certain areas of WB Main Street
- introduction of street trees
- introduction of light standards
- construction of 6' minimum width sidewalks

Typical Notes:  
 1. West bound = (WB)  
 2. East bound = (EB)

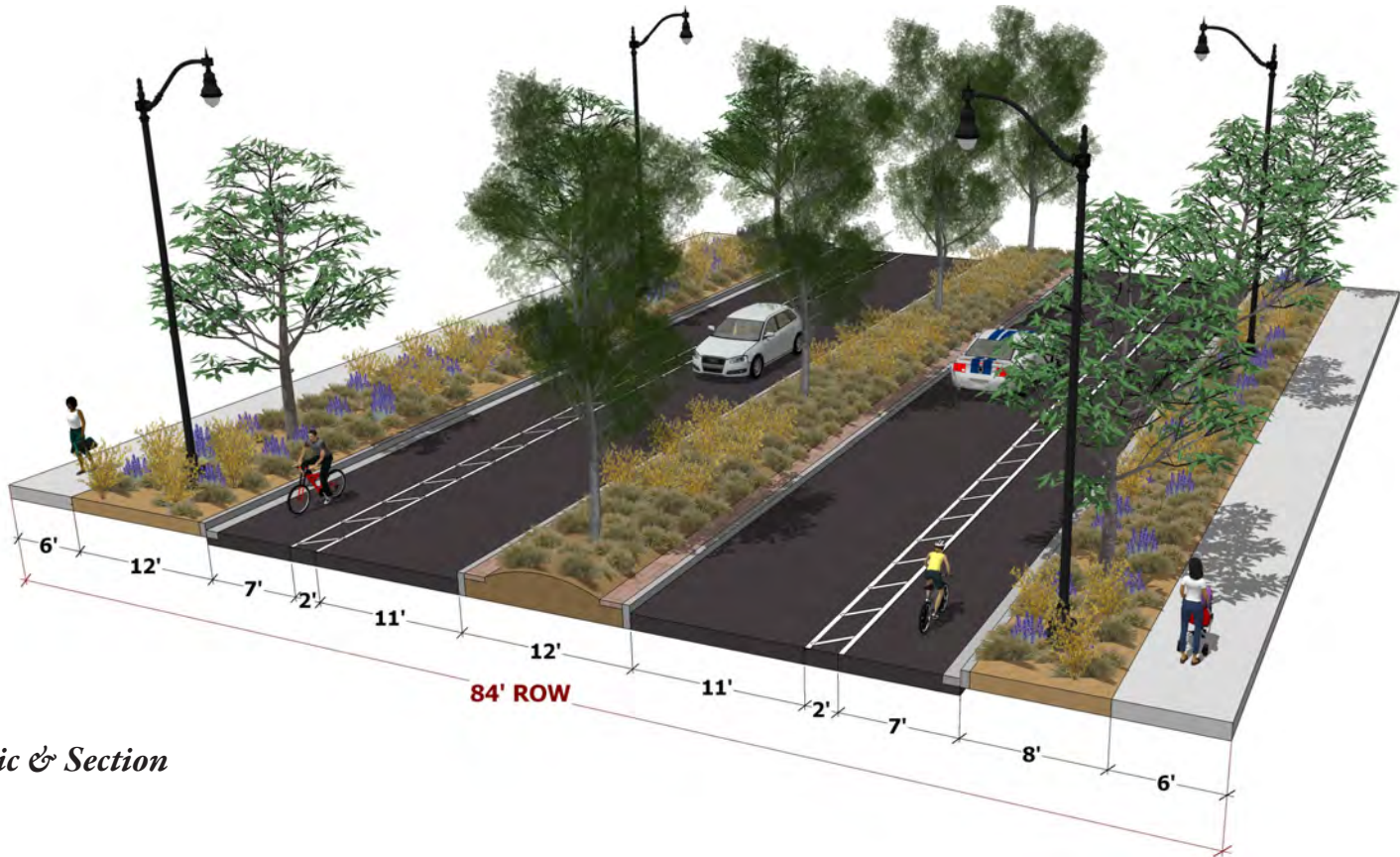
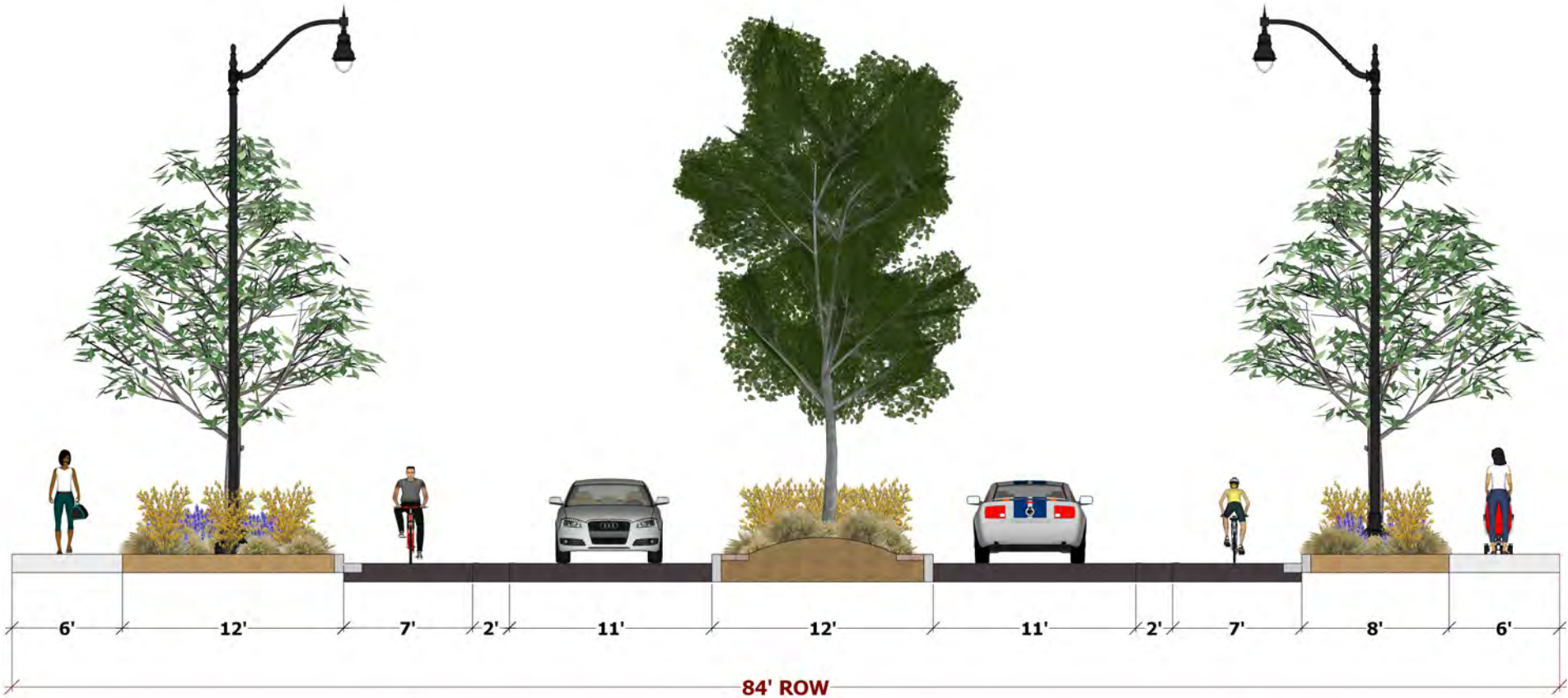


Fig. 5.2 Isometric & Section





### 5.1.2 90' ROW Section from (EB) 7th St. to (WB) 3rd Ave. and from (EB) Del Monte to (WB) Albany Ave.

The proposed improvements along this portion of the corridor include:

- addition of a 12' planted median.
- medians are located at intersections (Defines the left turn pocket).
- Two-Way Left Turn Lane (TWLTL) in the center of the roadway is still a functioning part of this ROW (large vehicles turning into adjacent properties).
- reduction of lane widths to 11' (1 travel lane) on EB and WB Main Street
- introduction of a 10' planted parkway strip on EB Main Street
- introduction of a 8' planted parkway strip on WB Main Street
- introduction of a 2' lane buffer, a 3' door zone buffer and a 4' bike lane making a total 9' striped bike lane (Class 2) on WB Main Street
- introduction of a 2' striped lane, along with a 7' striped bike lane (Class 2) for a total bike lane of 9' on EB Main Street
- the travel lane and bike lane equal 20', which is the minimum for emergency vehicles. EB & WB Main Street
- introduction of street trees
- introduction of light standards
- construction of a 6' minimum width sidewalk

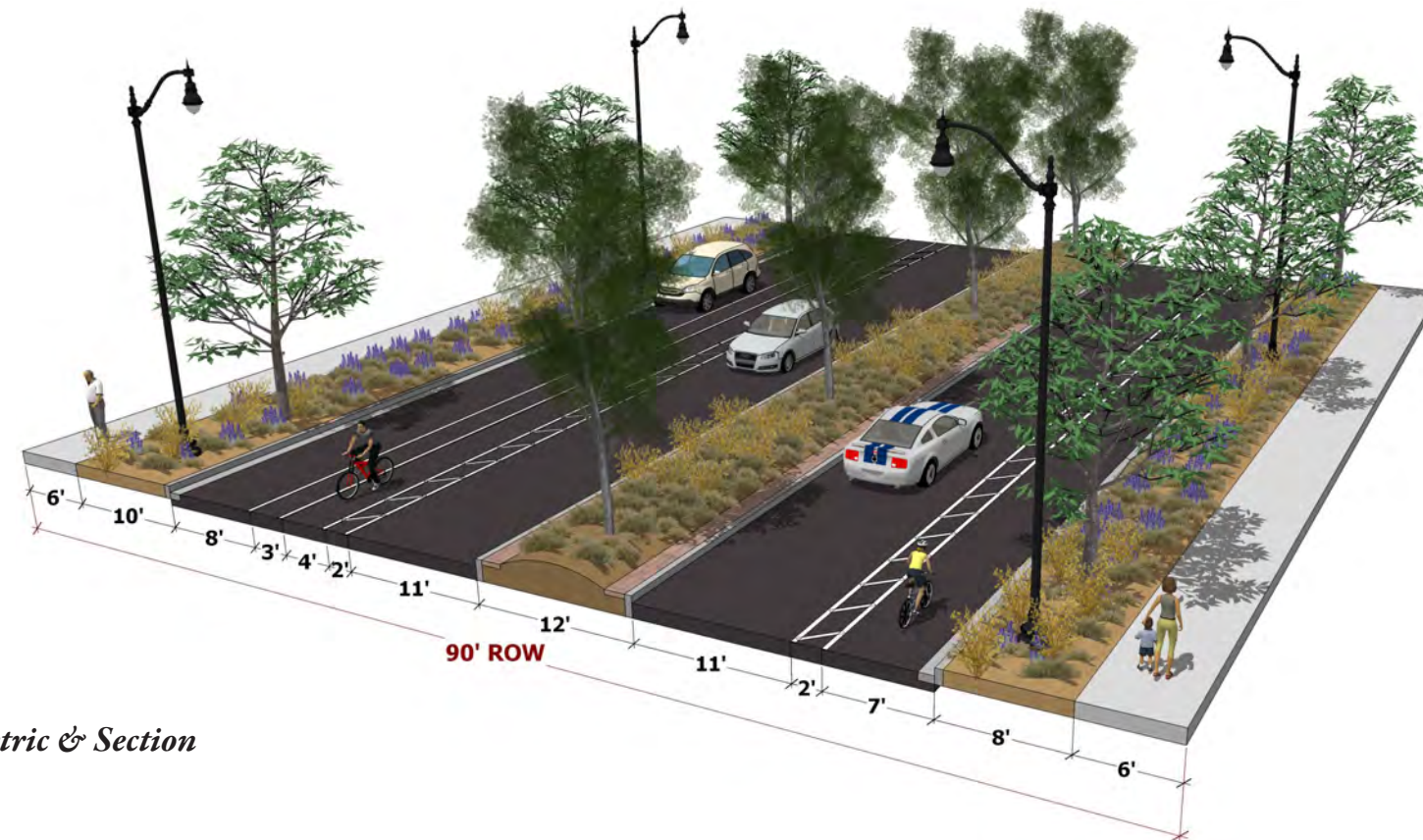
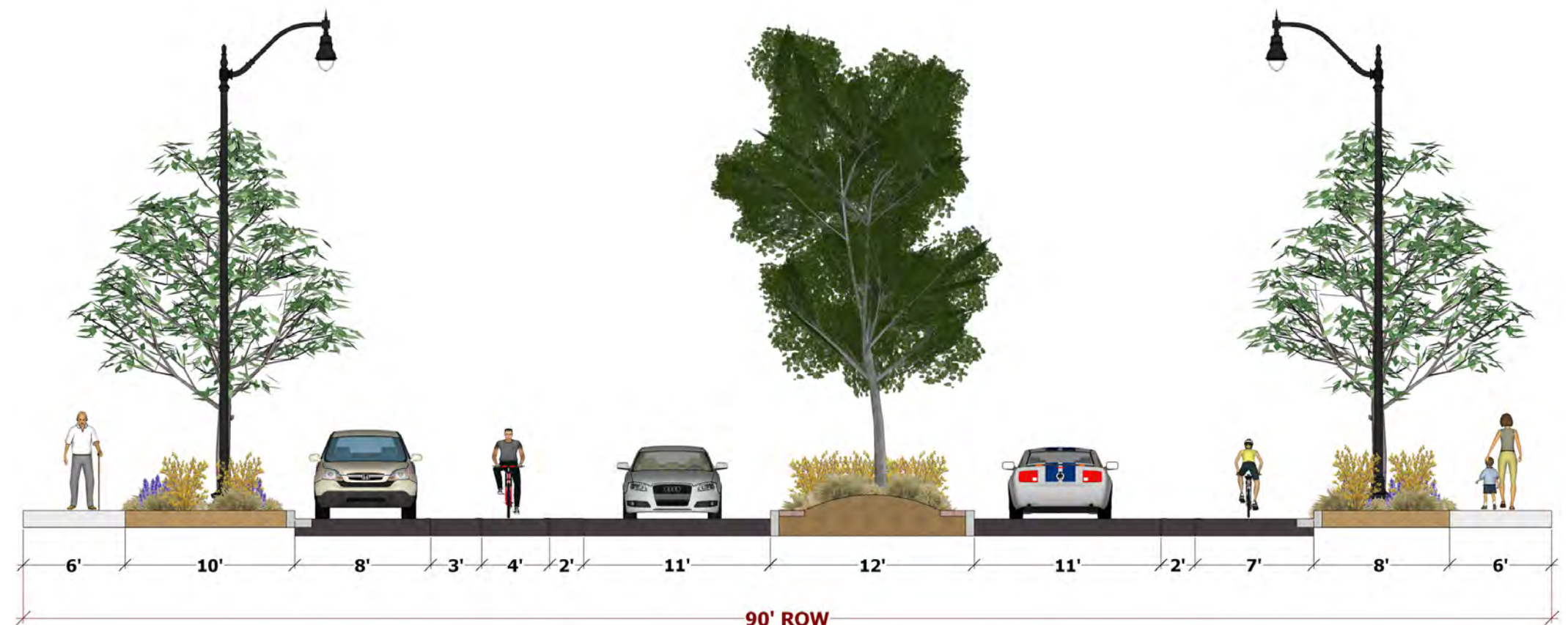


Fig. 5.3 Isometric & Section

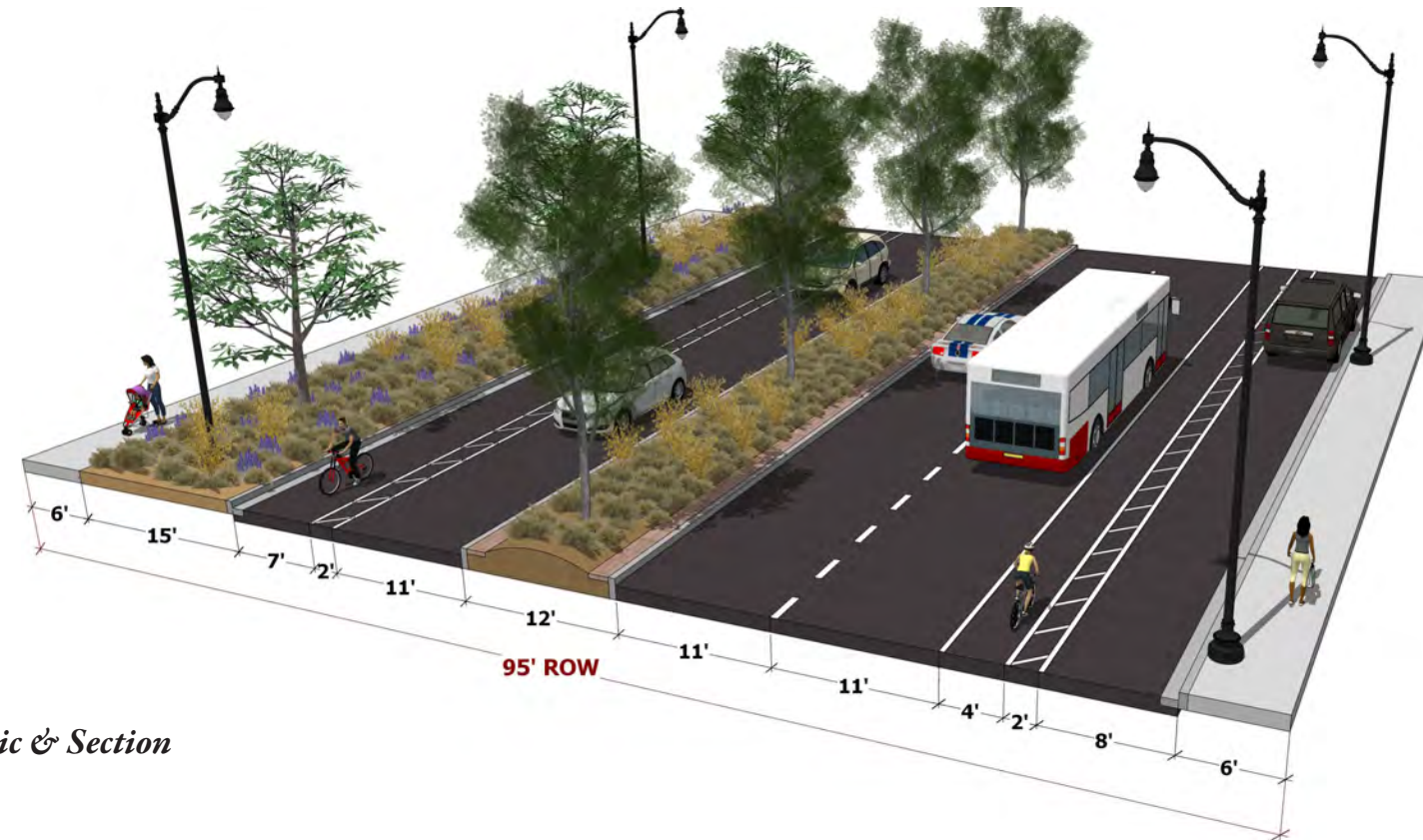




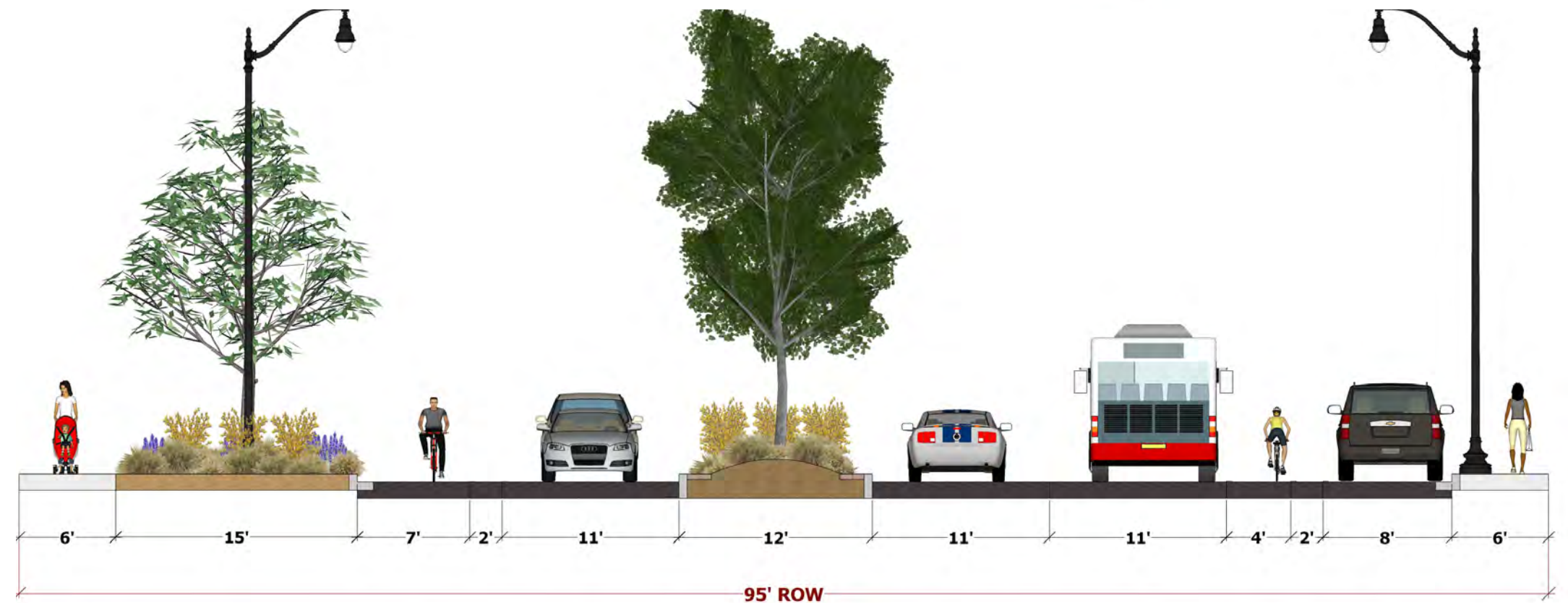
### 5.1.3 95' ROW Section from (EB) Broadway to (WB) 7th St.

The proposed improvements along this portion of the corridor include:

- addition of a 12' planted median.
- medians are located at intersections helping to define the left turn pocket
- Two-Way Left Turn Lane in the center of the roadway is still a functioning part of this ROW, which is needed for large vehicles turning into adjacent properties
- reduction of lane widths to 11' (2 travel lanes) WB Main Street
- reduction of lane widths to 11' (1 travel lane) EB Main Street
- introduction of a 15' planted parkway strip on EB Main Street
- introduction of a 2' striped door zone buffer and a 4' striped bike lane (Class 2) where parking occurs for a total of a 6' striped bike lane (Class 2) on EB Main Street
- introduction of a 2' lane buffer and a 7' striped bike lane (Class 2) where parking does not occur, for a total of a 9' wide striped bike lane on EB Main Street
- retention of the 8' parallel parking on WB Main St. in certain areas.
- travel lane and bike lane equal to 20', which is the minimum width for emergency vehicles between raised curbs and medians on EB & WB Main St.
- introduction of street trees
- introduction of light standards
- construction of 6' minimum width sidewalks



*Fig. 5.4 Isometric & Section*





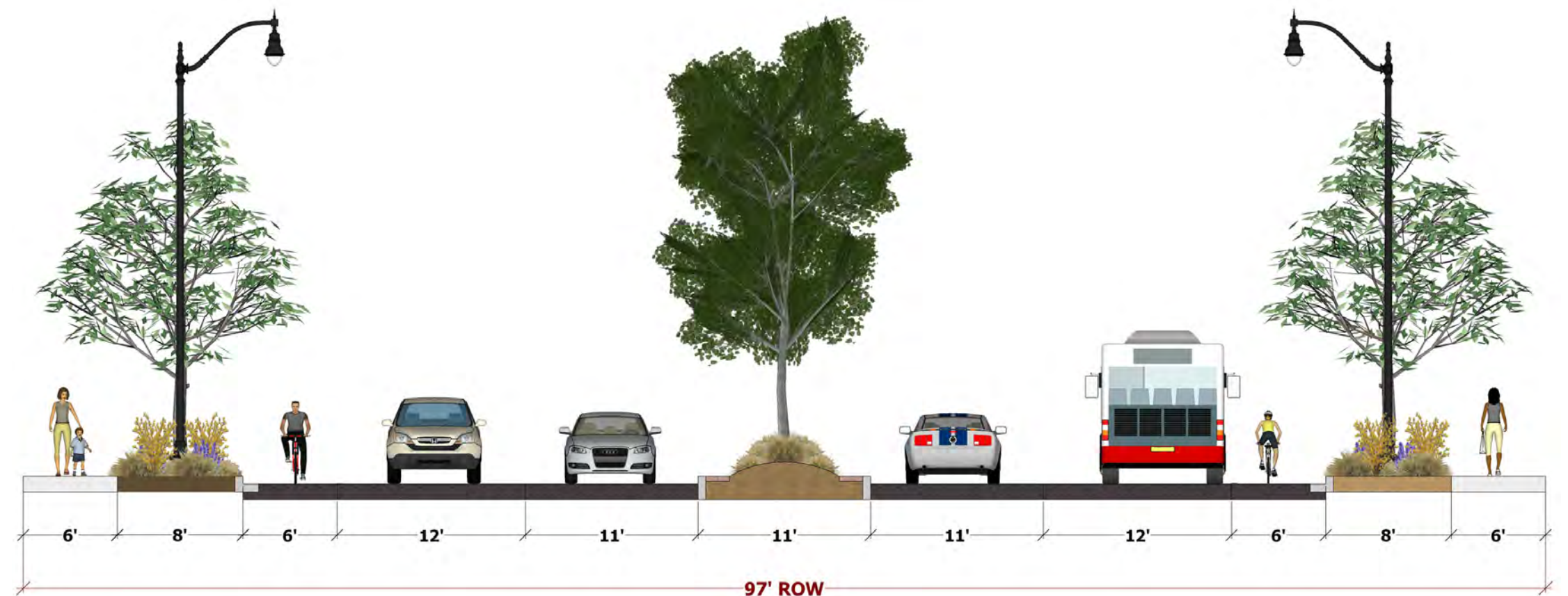
#### 5.1.4 97' ROW Section from (EB) Albany Ave. to (WB) Date St.

The proposed improvements along this portion of the corridor include:

- 11' planted median.
- medians are located at intersections to defines the left turn pocket
- Two-Way Left Turn Lane in the center of the roadway is still a functioning part of this ROW that will allow larger vehicles to turn into adjacent properties
- reduction of lane widths to 11' for travel lane #1 on EB and WB Main Street
- reduction of lane widths to 12' in travel lane #2 on EB and WB Main Street
- introduction of an 8' planted parkway strip
- introduction of a 6' striped bike lane (Class 2)
- introduction of street trees
- introduction of light standards
- construction of 6' minimum width side-walks



*Fig. 5.5 Isometric & Section*

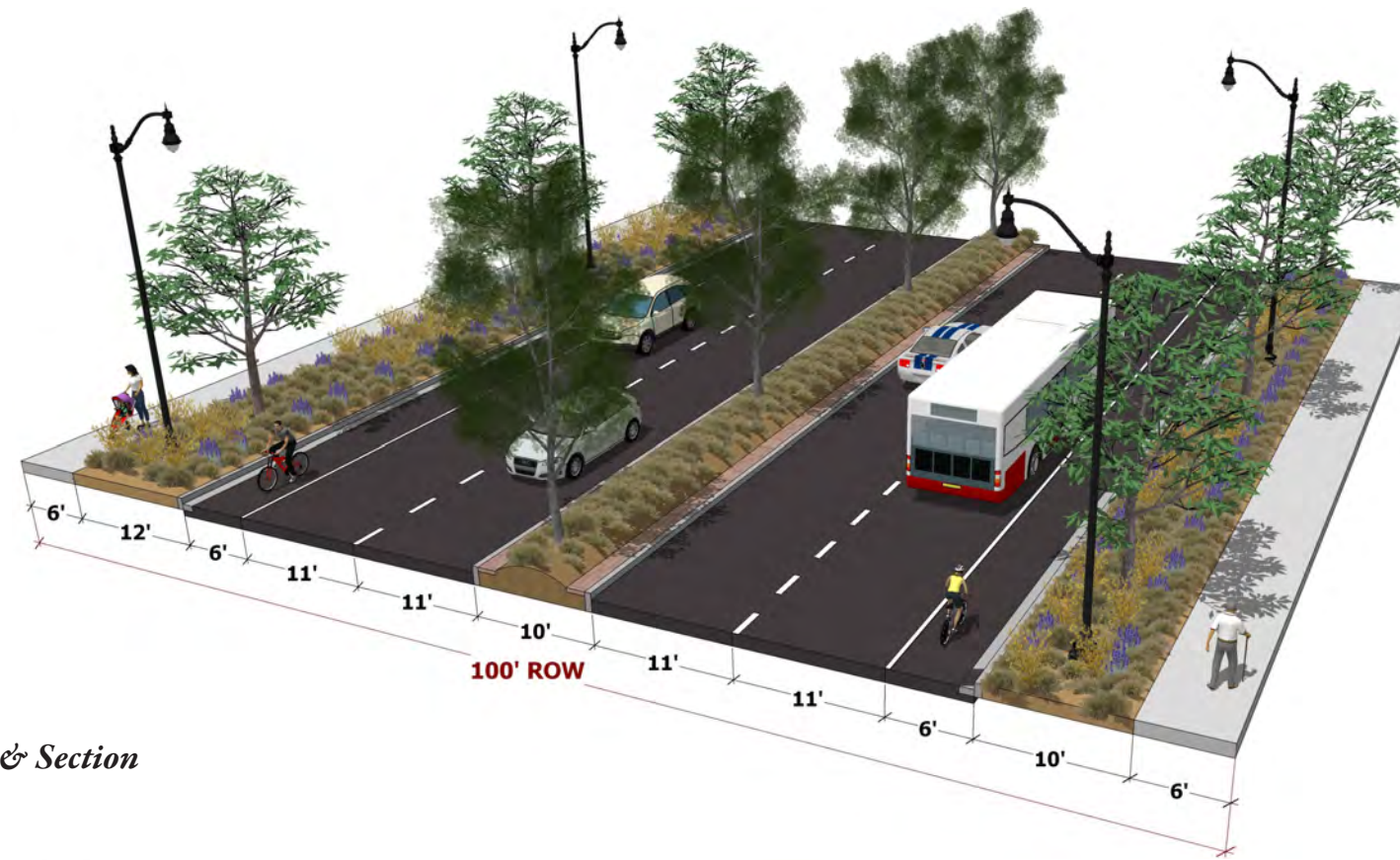




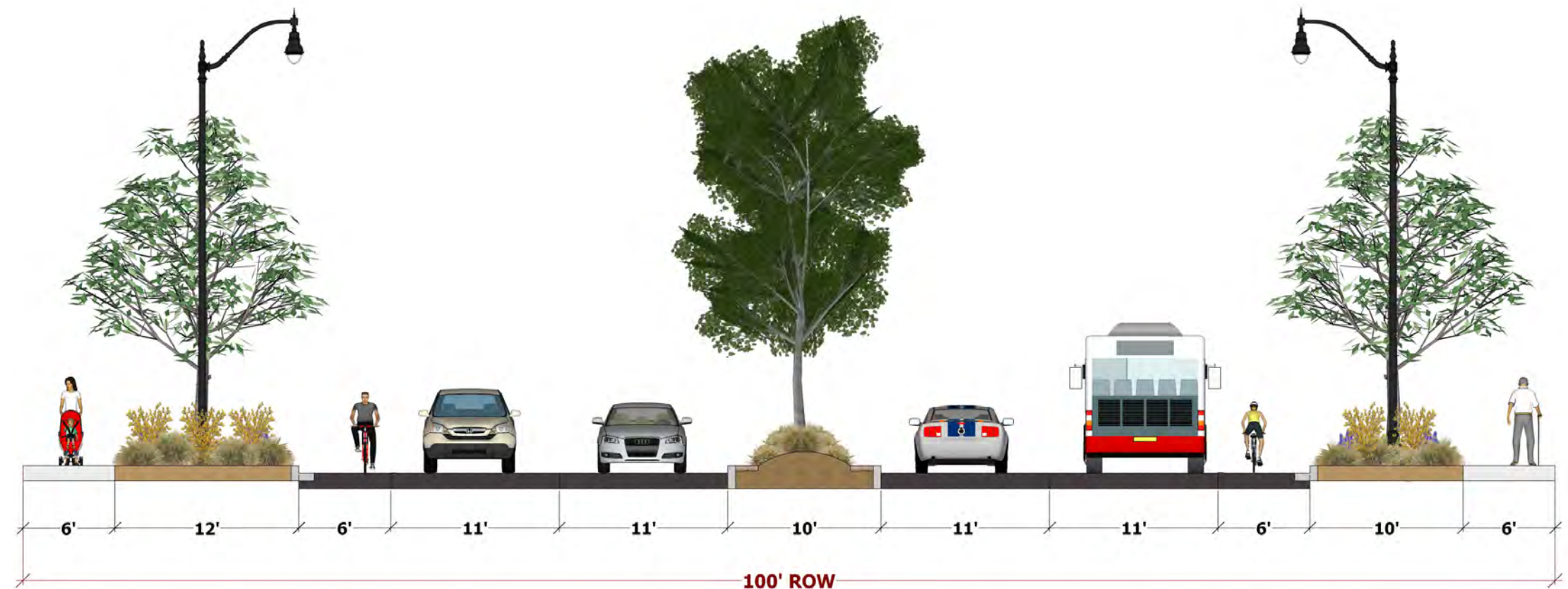
### 5.1.5 100' ROW Section from (EB) 4112 Main St. to (WB) Melrose Ave.

The proposed improvements along this portion of the corridor include:

- a 10' planted median
- medians are located at intersections to define the left turn pocket and at a HAWK Crossings
- Two-Way Left Turn Lane in the center of the roadway are still a functioning part of this ROW to allow for larger vehicles to turn into adjacent properties
- reduction of lane widths to 11' (all 4 travel lanes)
- introduction of a 12' planted parkway strip on EB Main Street and a 10' parkway strip on WB Main Street
- introduction of a 6' striped bike lane EB and WB bound Main Street
- introduction of street trees.
- introduction of light standards.
- construction of 6' wide minimum sidewalks



*Fig. 5.6 Isometric & Section*





### 5.1.6 104' ROW Section from (EB) Industrial Blvd. to (WB) Broadway

The proposed improvements along this portion of the corridor include:

- a 10' planted median
- medians are located at intersections
- Two-Way Left Turn Lane in the center of the roadway is still a functioning part of this ROW to allow for larger vehicles to turn into adjacent properties
- education of lane widths to 11' (all 4 travel lanes)
- introduction of a 5' planted parkway strips
- introduction of a 6' striped bike lane (Class 2)
- retention of the 8' parallel parking on EB Main Street
- introduction of street trees
- introduction of light standards
- construction of 6' wide minimum side-walks

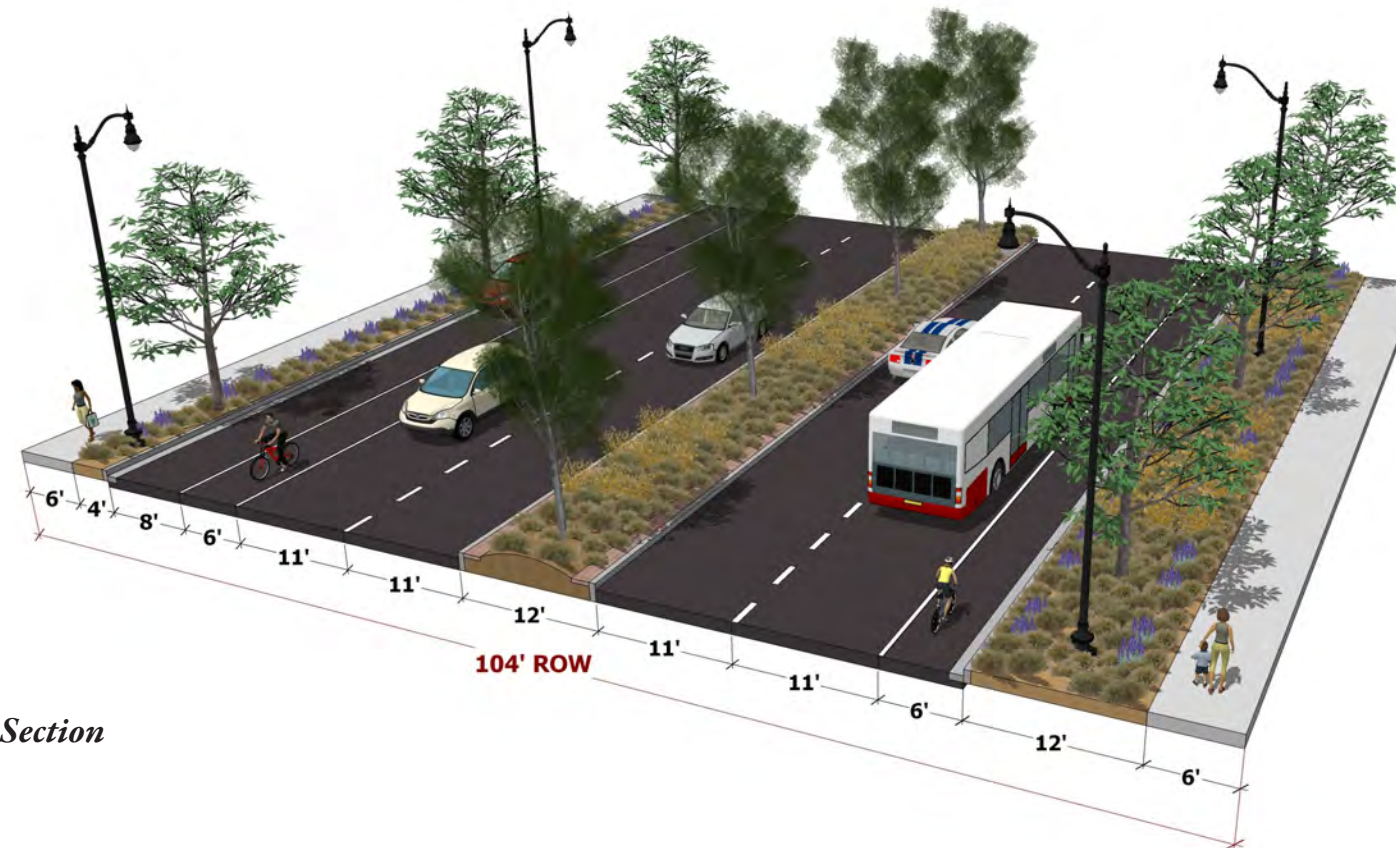
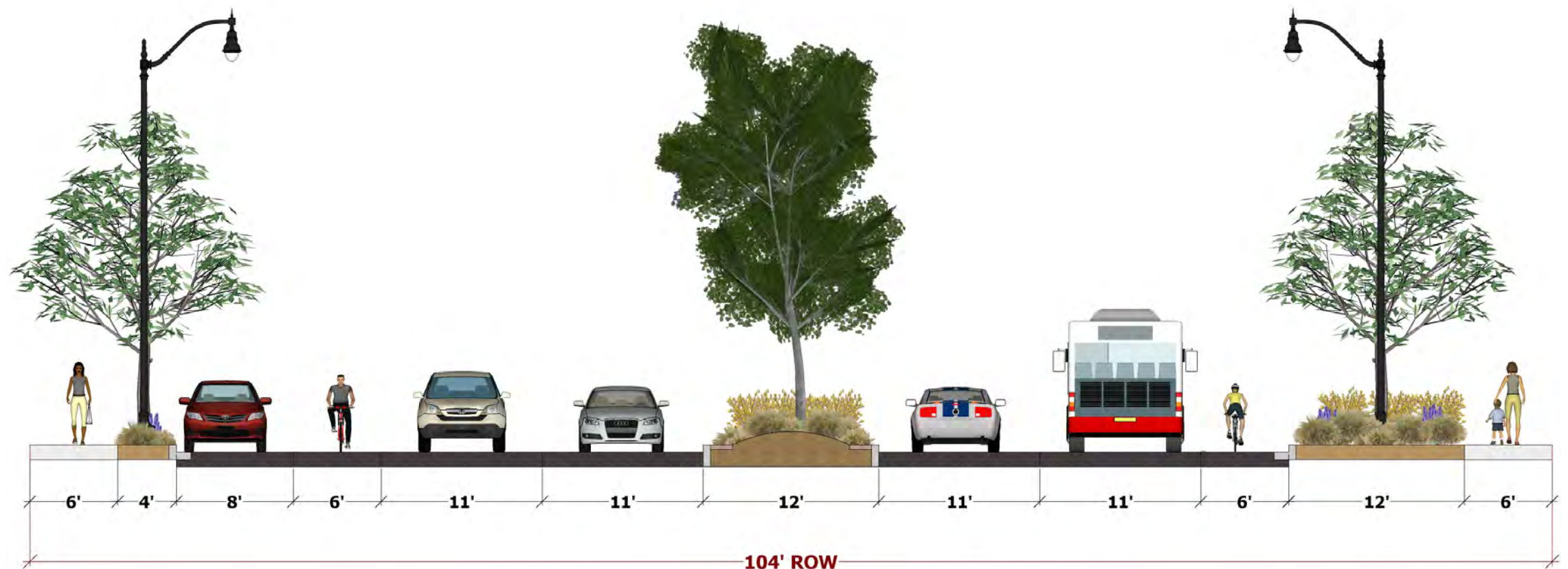


Fig. 5.7 Isometric & Section





5.1.7 Proposed Round-a-bouts

Round-a-bouts are shown as concepts in this plan. However, since no traffic analysis or ROW review was part of the scope of this study, it is difficult to determine the viability or feasibility of this concept. Further technical analysis is needed before the roundabouts can be considered as recommendations to implement. However, this study’s purpose was to identify planning level concepts to gauge public interest in Round-a-

bouts and other types of traffic circles and based on the input received, they did obtain support from those that participated in the group meetings and workshops.



Fig. 5.8 Isometric



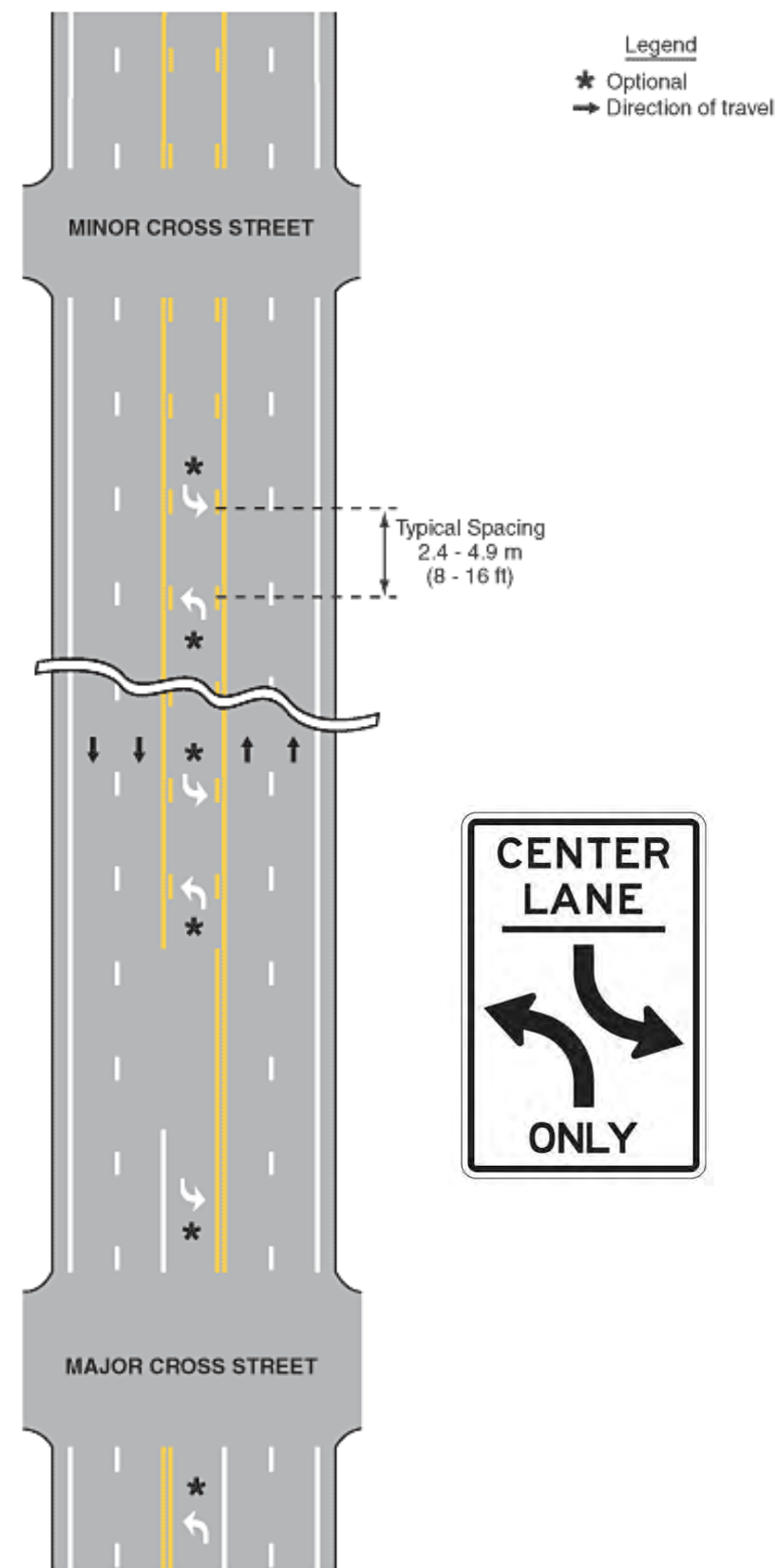
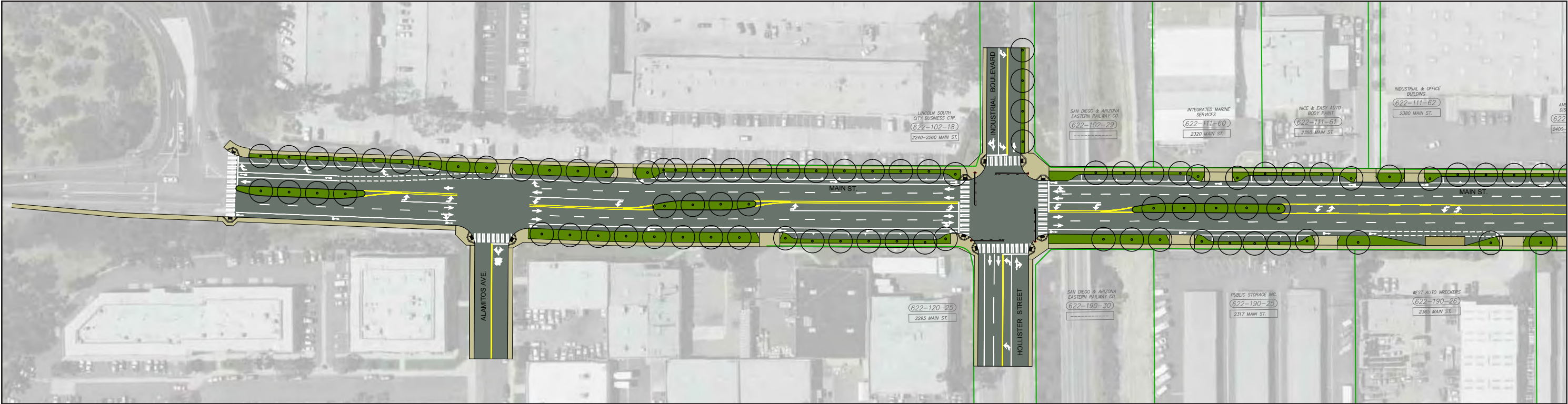


Fig. 5.9: Two-Way Left Turn Lane (TWLTL)

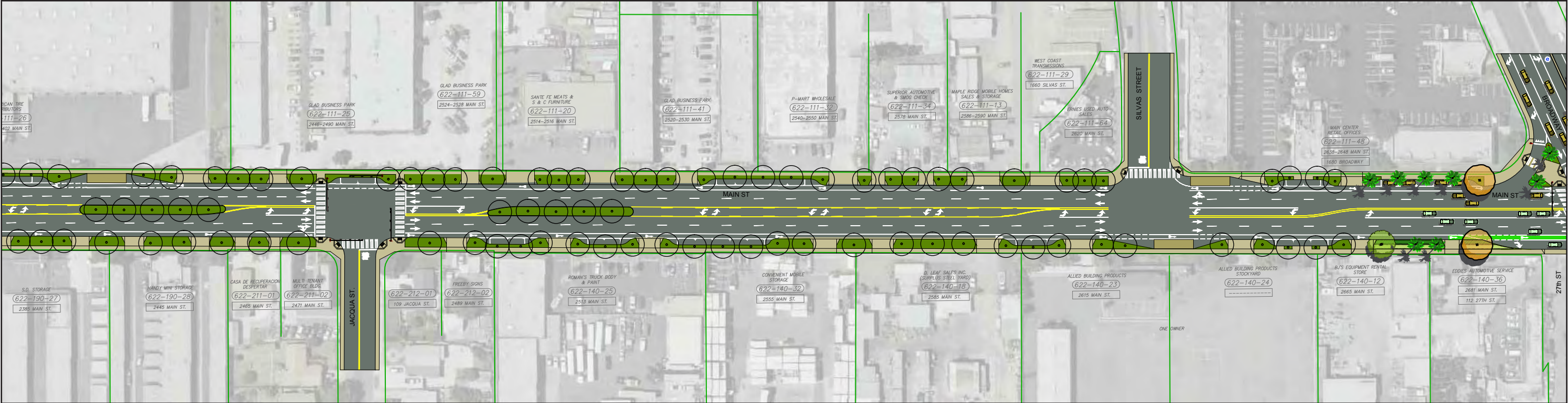
**5.2 Roadway Option “B”  
(Two-Lanes each way)**

Option “B” shows a two-lane solution, starting 300’ east on the east bound lane (EB) from Broadway and ending 390’ after Albany Ave. on the west bound lane (WB). This optional concept still takes into account the full range of multi-model uses of the roadway and applied them as a single concept for the entire 3 -mile stretch of roadway. The concept was developed as a backup to Option “A” Round-a-bouts” in case future modeling of the traffic movements or other traffic analysis render this option infeasible. The Round-ab-bouts could also receive some difficulty in implementing or approving through the City Council if an effort is not made to fully model the options and to study the truck specific concerns associated with these recommendations. Round-a-bouts can be made to work with any size vehicle, however, the throughput of these trucks along with high levels of vehicular movements, may be in question. Option “B” can work in place of Option “A”, but would not have all the design and traffic calming benefits of this option. (See Figure 5.10)



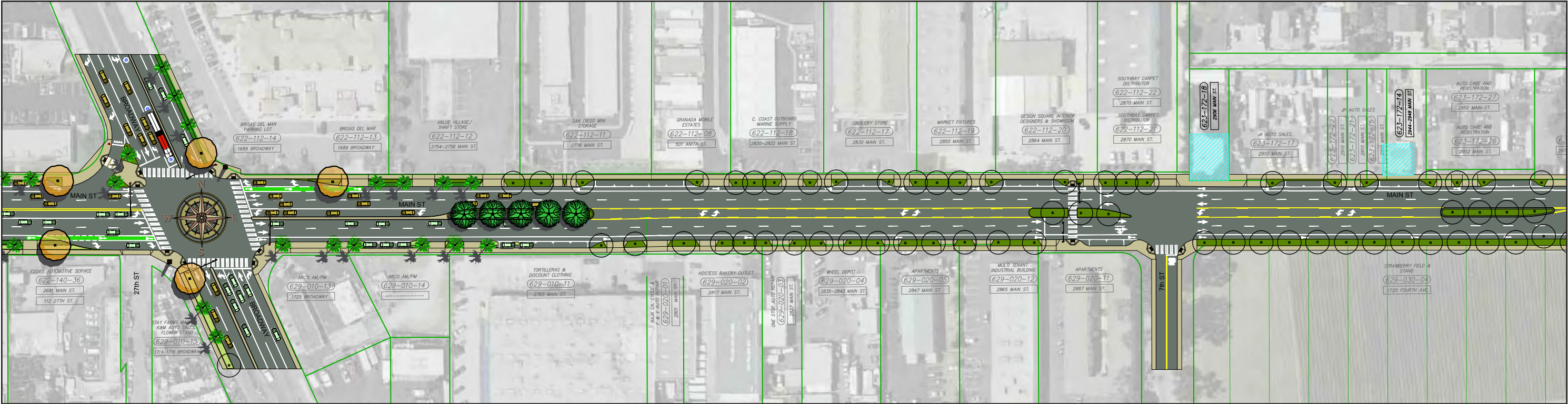


Roadway Option “B” (Two-Lanes each way): Fig. 5.10-A

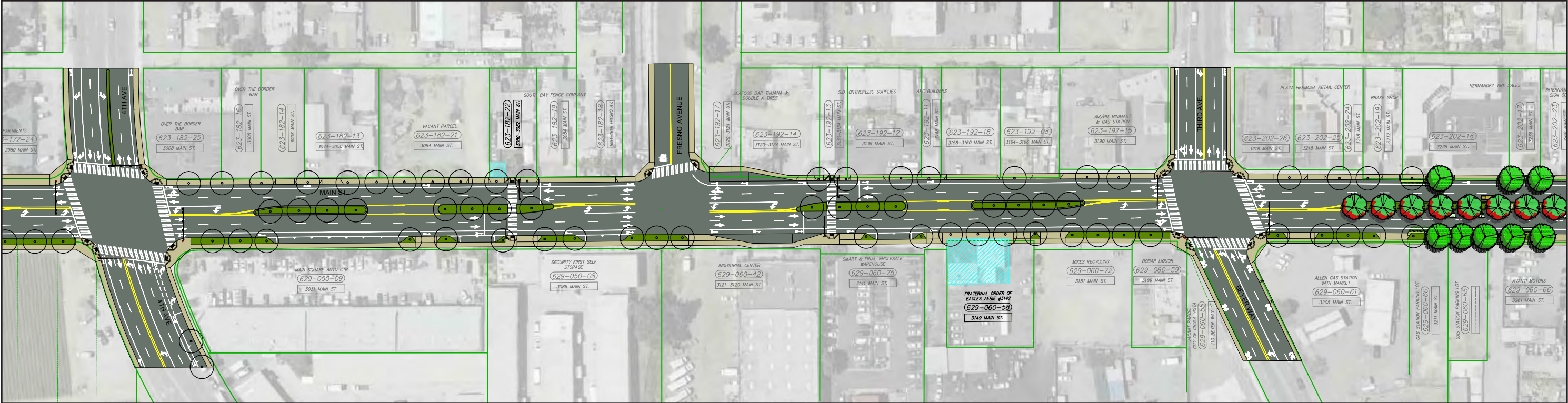


Roadway Option “B” (Two-Lanes each way): Fig. 5.10-B



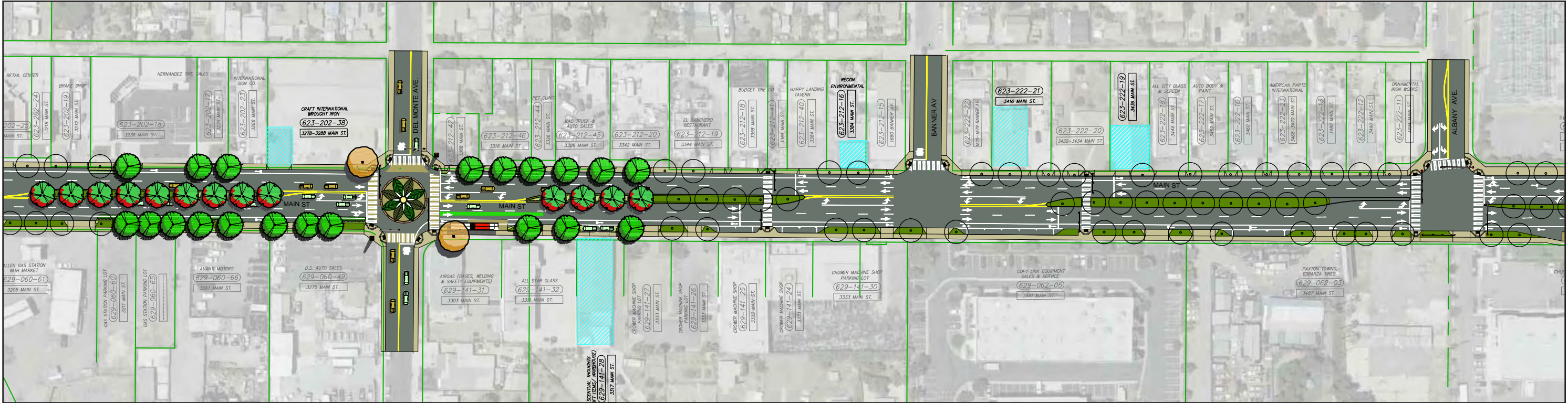


Roadway Option “B” (Two-Lanes each way): Fig. 5.10-C

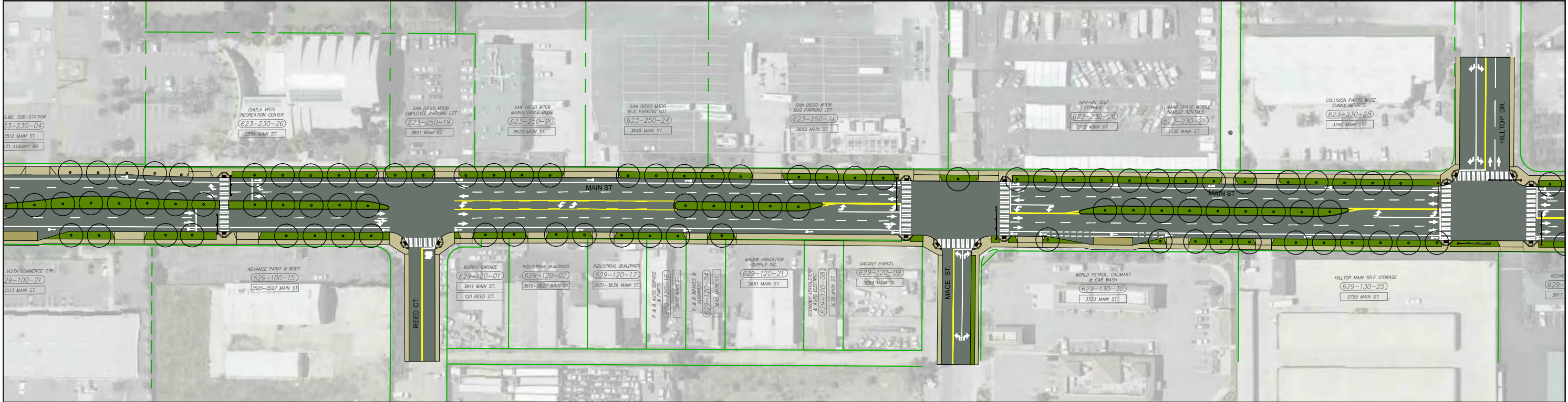


Roadway Option “B” (Two-Lanes each way): Fig. 5.10-D



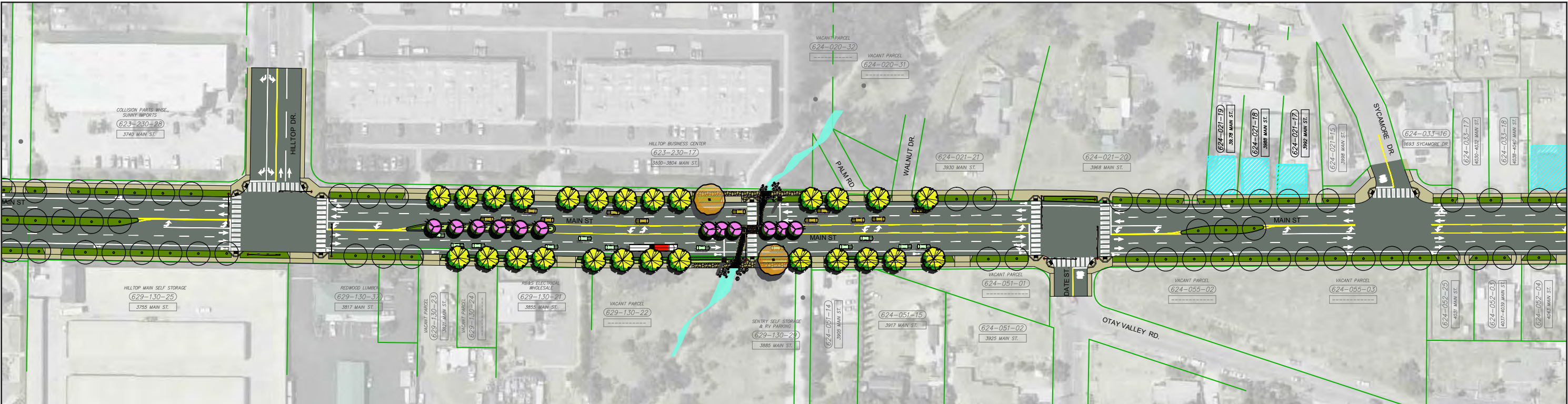


Roadway Option “B” (Two-Lanes each way): Fig. 5.10-E

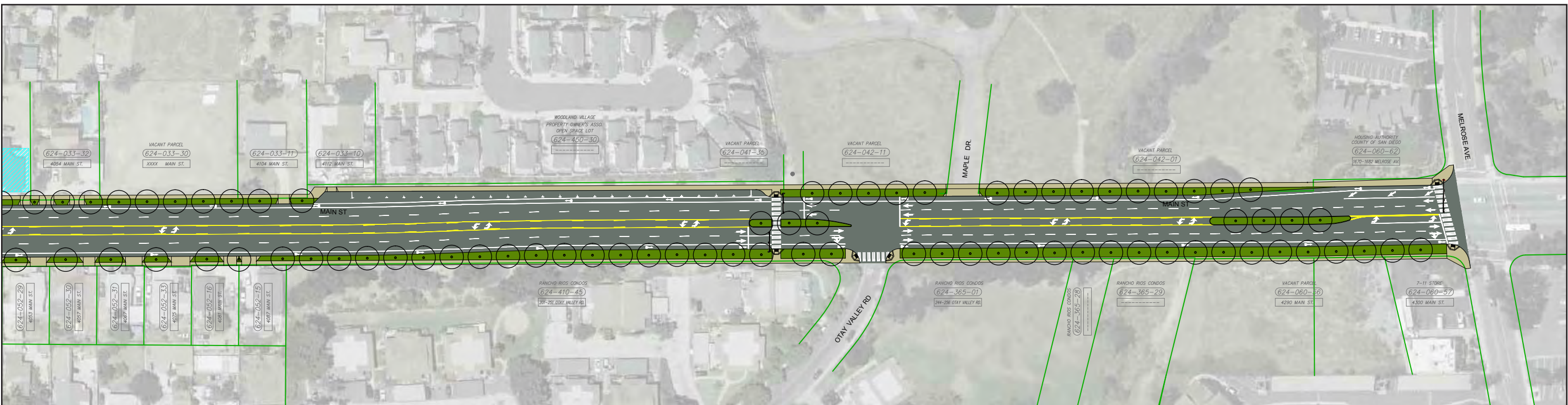


Roadway Option “B” (Two-Lanes each way): Fig. 5.10-F





**Roadway Option “B” (Two-Lanes each way): Fig. 5.10-G**



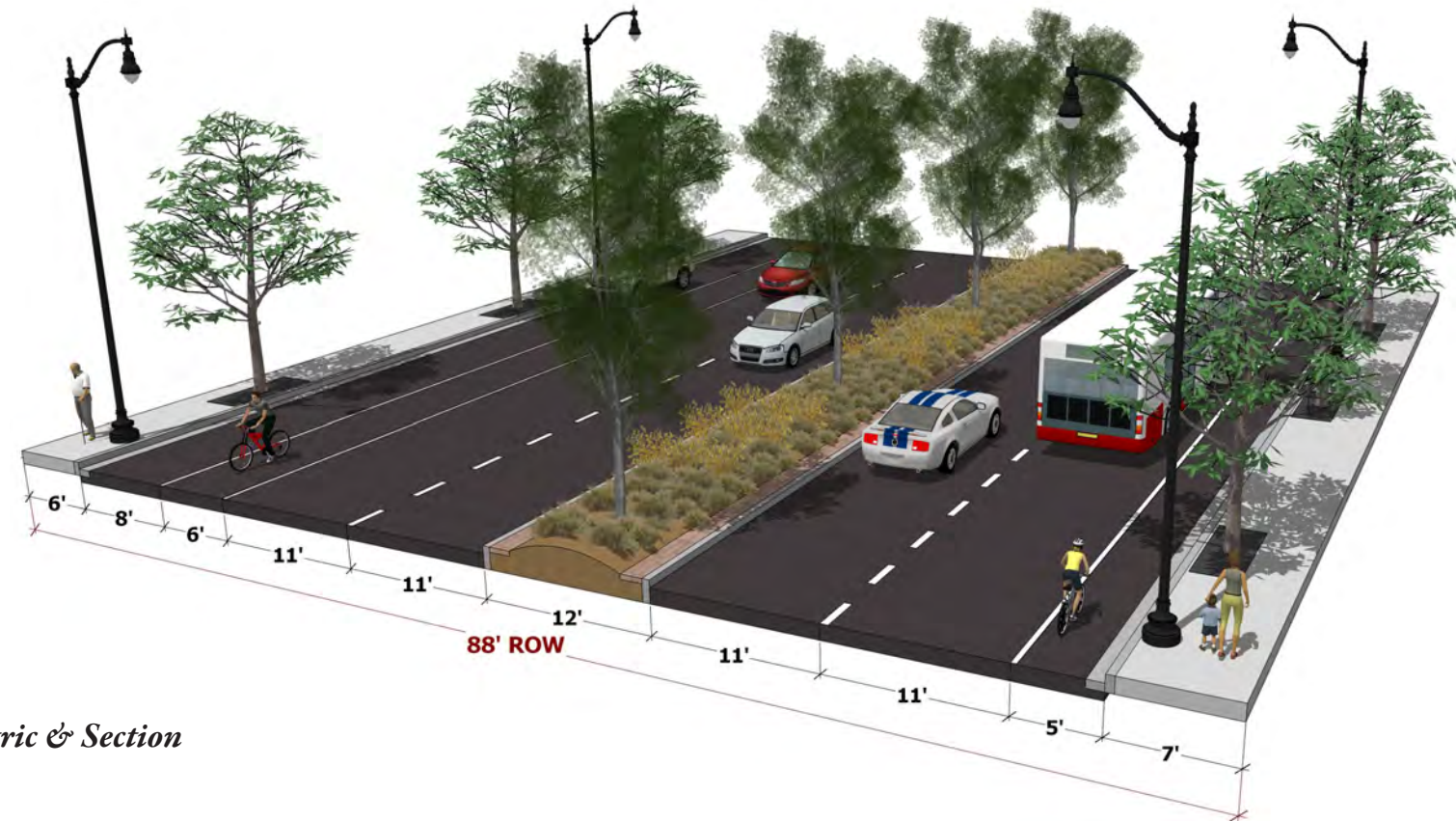
*Roadway Option “B” (Two-Lanes each way): Fig. 5.10-H*



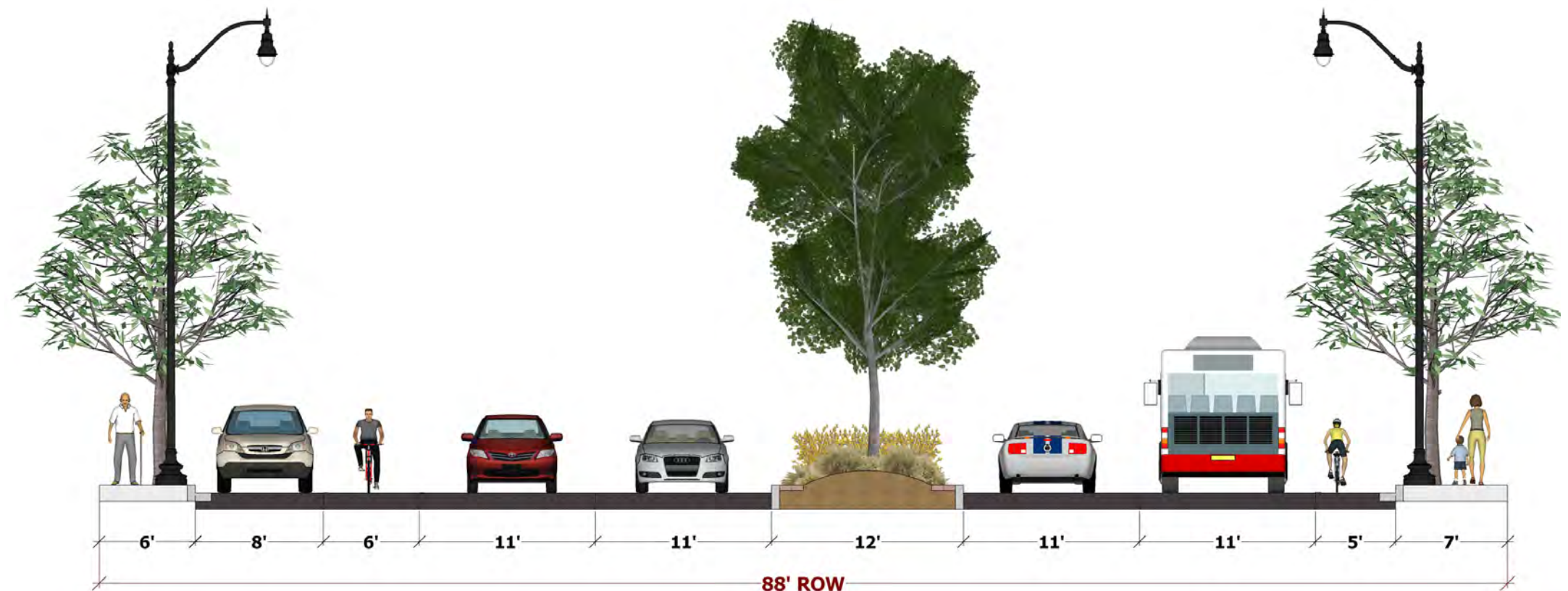
### 5.2.1 88' ROW Section from (WB) 4th Ave. to (EB) Banner Ave.

The proposed improvements along this portion of the corridor include:

- addition of a 12' planted median
- medians are located at intersections helping to define the left turn pocket
- Two-Way Left Turn Lane in the center of the roadway is still a functioning part of this ROW, which is needed for large vehicles turning into adjacent properties
- reduction of lane widths to 11' (1 travel lane) WB Main Street
- reduction of lane widths to 11' (1 travel lane) EB Main Street
- introduction of a 5' striped bike lane (Class 2) WB Main Street
- introduction of a 6' striped bike lane (Class 2) EB Main Street
- the travel lane and bike lane equal 20', which is the minimum for emergency vehicles
- retention of the 8' parallel parking on EB Main St. in certain areas. When there is no on-street parallel parking an 8' parkway will be present
- introduction of street trees
- introduction of light standards
- construction of a 6' sidewalk on EB Main Street and 7' sidewalk with tree grates on WB Main Street



*Fig. 5.11 Isometric & Section*

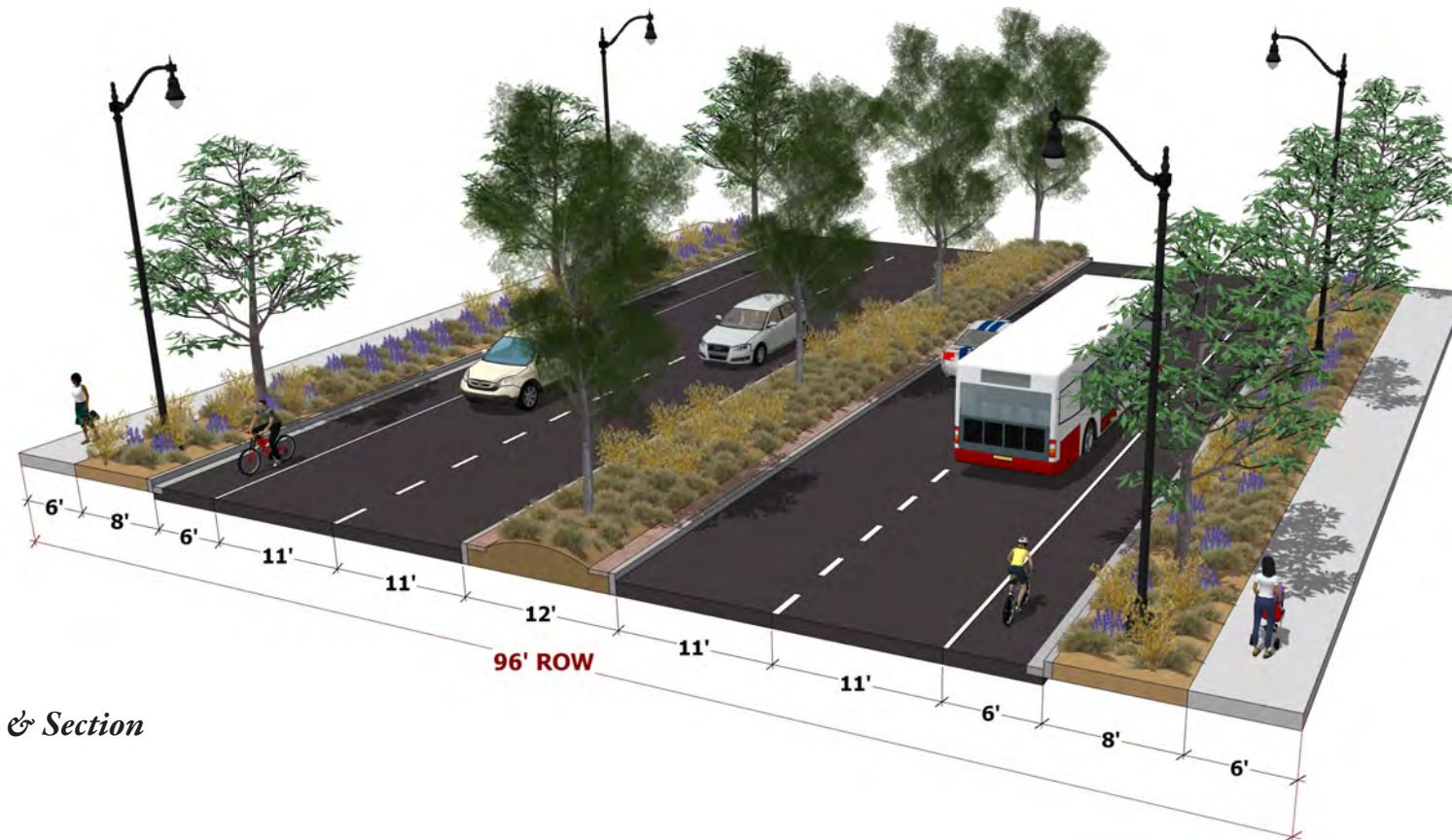




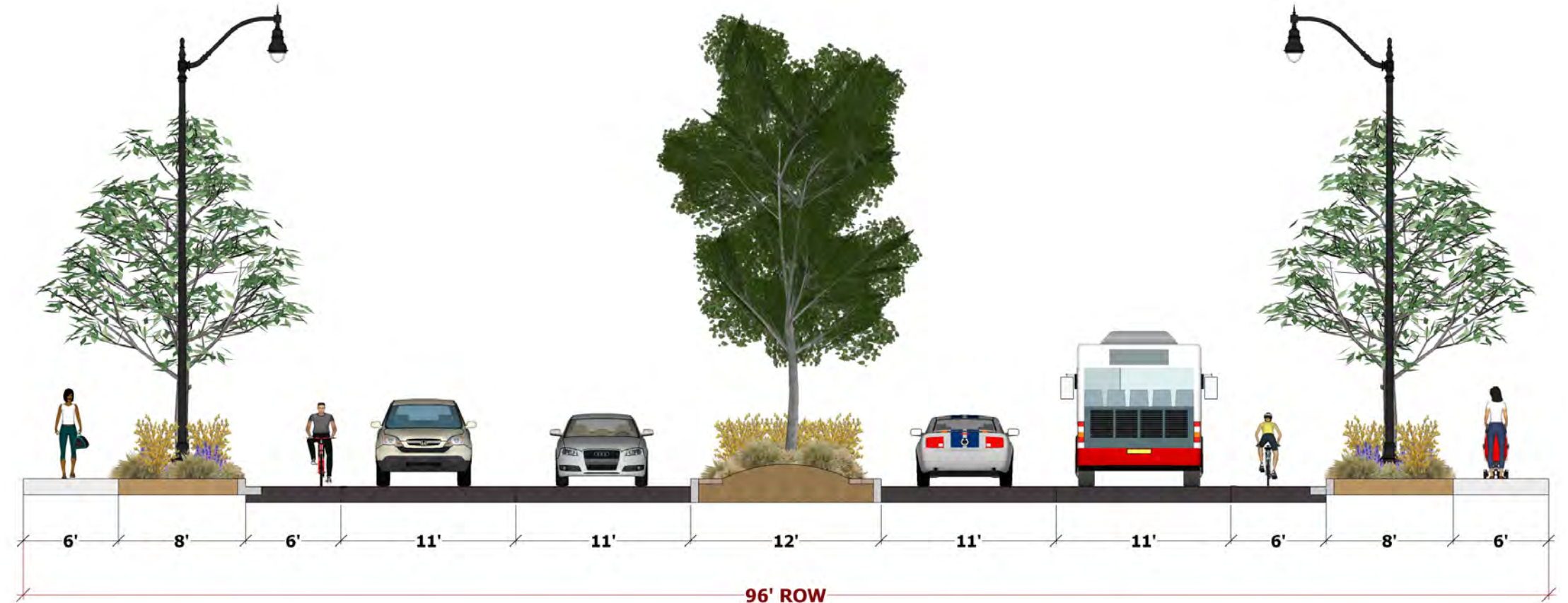
### 5.2.2 96' ROW Section from (EB) Broadway to (WB) 4th Ave.

The proposed improvements along this portion of the corridor include:

- addition of a 12' planted median
- Two-Way Left Turn Lane
- reduction of lane widths to 11' (1 travel lane) WB Main Street
- reduction of lane widths to 11' (1 travel lane) EB Main Street
- introduction of a 12' planted parkway strip on EB Main Street
- introduction of a 6' striped bike lane (Class 2) on EB & WB Main Street
- introduction of street trees
- introduction of light standard.
- construction of 6' minimum width side-walks
- introduction of 8' parkways



*Fig. 5.12 Isometric & Section*





5.3 Sea Garden District Concept

San Diego Bay National Wildlife Refuge is an urban wildlife refuge located on San Diego Bay at the mouth of the nearby Otay River, and accessible through the Otay River Valley system of trails. The refuge comprising 316 acres of salt marsh and coastal uplands surrounded by urban development, is a critically important area for wildlife because over 90 percent of the historic wetlands of San Diego Bay have been filled in, drained, or diked. The Refuge supports important programs for wildlife and habitat management that focus on the recovery of the endangered California Least Tern, Light-footed Clapper Rail, threatened Western Snowy Plover, and the endangered Salt Marsh Bird's Beak. A Nature Center parking lot is located at the western terminus of E Street where shuttle buses can take visitors to the nature center. This is one of South Bay's many important and exceptional parks and wildlife refuges on San Diego Bay. The collection of parks and refuges including lavish gardens, fun playgrounds, relaxing walkways and peeks at San Diego wildlife, unique plant life, and endangered and threatened species form the basis for the Sea Garden theme. This theme provides a natural link to the regional character and is emphasized and interpreted to provide Main Street with a logical connection to the surrounding context.

Some of the selected site features and components that occur at selected intersections (or gateways) would include styled monument columns surrounded by mini-plazas and site furnishings. The intersections would include enhanced paving with large sea life flora and fauna icons and imagery such as seashells

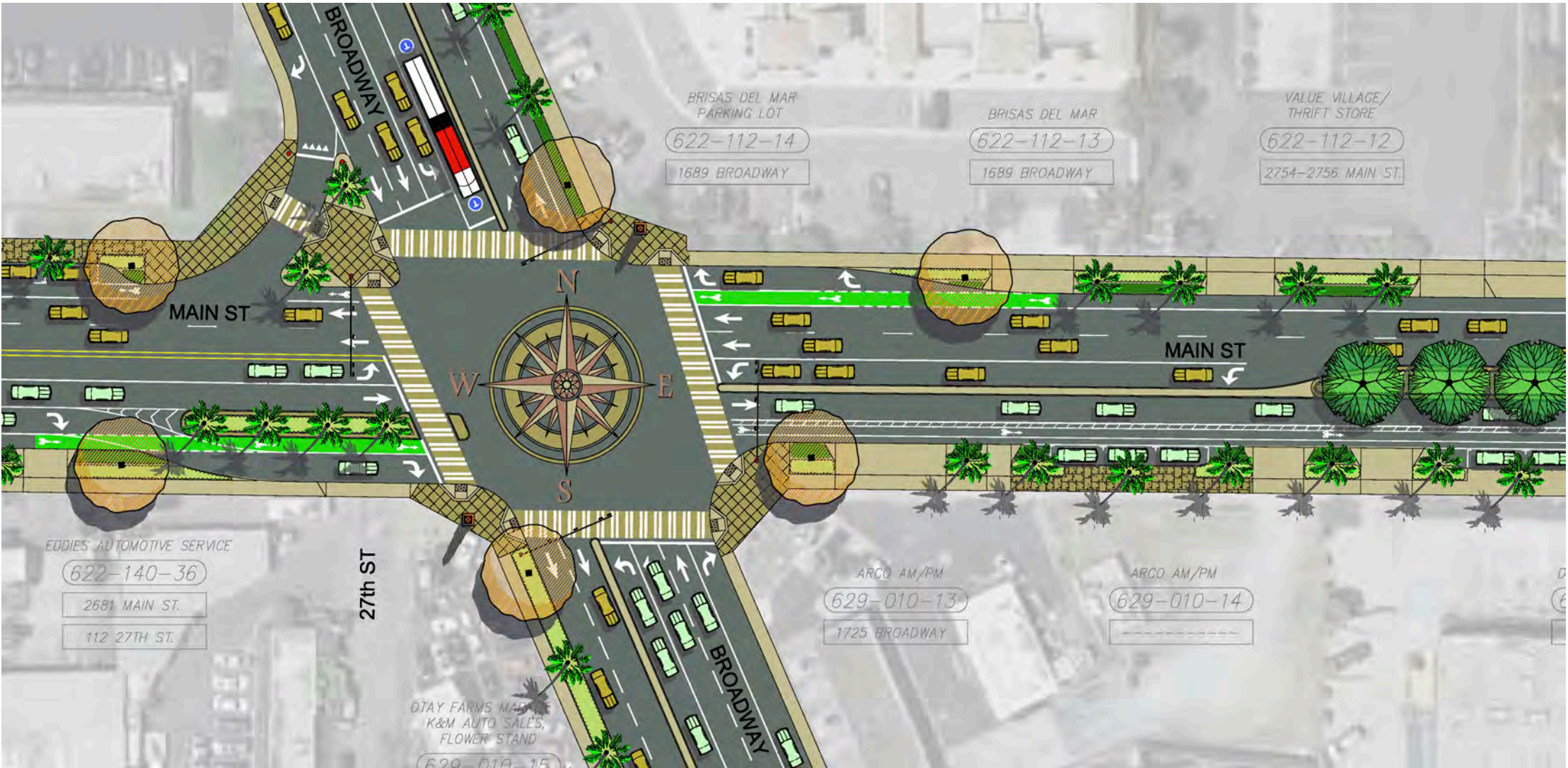












Fig. 5.13

The parkway and median trees would consist of Melaleuca, flowering New Zealand Christmas trees, Guadalupe and Date Palms; shrubs would include aloes, flax, sedges and rosemary.

CONCEPTUAL PLANT MATERIAL LEGEND		
DIST. MARKER TREES SUCH AS: 36" BOX SIZES		
	<i>PISTACIA chinensis</i>	Chinese Pistache
	<i>METROSIDEROS excelsa</i>	New Zealand Christmas Tree
MEDIAN TREES SUCH AS: 36" BOX SIZES		
	<i>MELALEUCA linarfolia</i>	Snow in Summer
	<i>METROSIDEROS excelsa</i>	New Zealand Christmas Tree
PARKWAY TREES SUCH AS: 24" BOX SIZE		
	<i>BRAHEA edulis</i>	Guadalupe Palm
	<i>PHOENIX dactylifera</i>	Date Palm
MEDIAN SHRUBS SUCH AS: 1 GAL. & 5 GAL. SIZES		
	<i>ALOE dewei</i>	Dawe Aloe
	<i>PHORMIUM 'Jack Spratt'</i>	Flax
PARKWAY SHRUBS SUCH AS: 1 GAL. & 5 GAL. SIZES		
	<i>ROSMARINUS 'Prostrata'</i>	Rosemary
	<i>CAREX spp.</i>	Sedge



5.4 Agriculture/Rancho District Concept

The Agricultural theme evolved from research into the ‘Orchard Period.’ With the completion of the Sweetwater Dam in the late 19th century, agriculture, and citrus trees in particular became a successful local crop. Chula Vista eventually grew to become the largest lemon-growing center in the world, and sustained that position for several decades. A railroad was built to connect San Diego, National City, Chula Vista and Otay. This railroad, known as the National City and Otay Railroad flourished for many years. The agricultural economy eventually led to the incorporation of Chula Vista on October 17, 1911. Local farms and ranches continued to grow lemons as their primary crop. At one time there were over eight packing houses in operation throughout the city.

Utilizing this design theme, site features and components would occur at selected intersections (or gateways) and would include styled lemon tree monument columns surrounded by mini-plazas and site furnishings. Intersections would include enhanced paving with large patterns of citrus blossoms and enhanced crosswalks for pedestrian traffic.

The parkway and median trees would consist of Chinese Pistache, flowering Bradford Pears and New Zealand Christmas trees; shrubs would include native grasses, sedges and fortnight lilies.

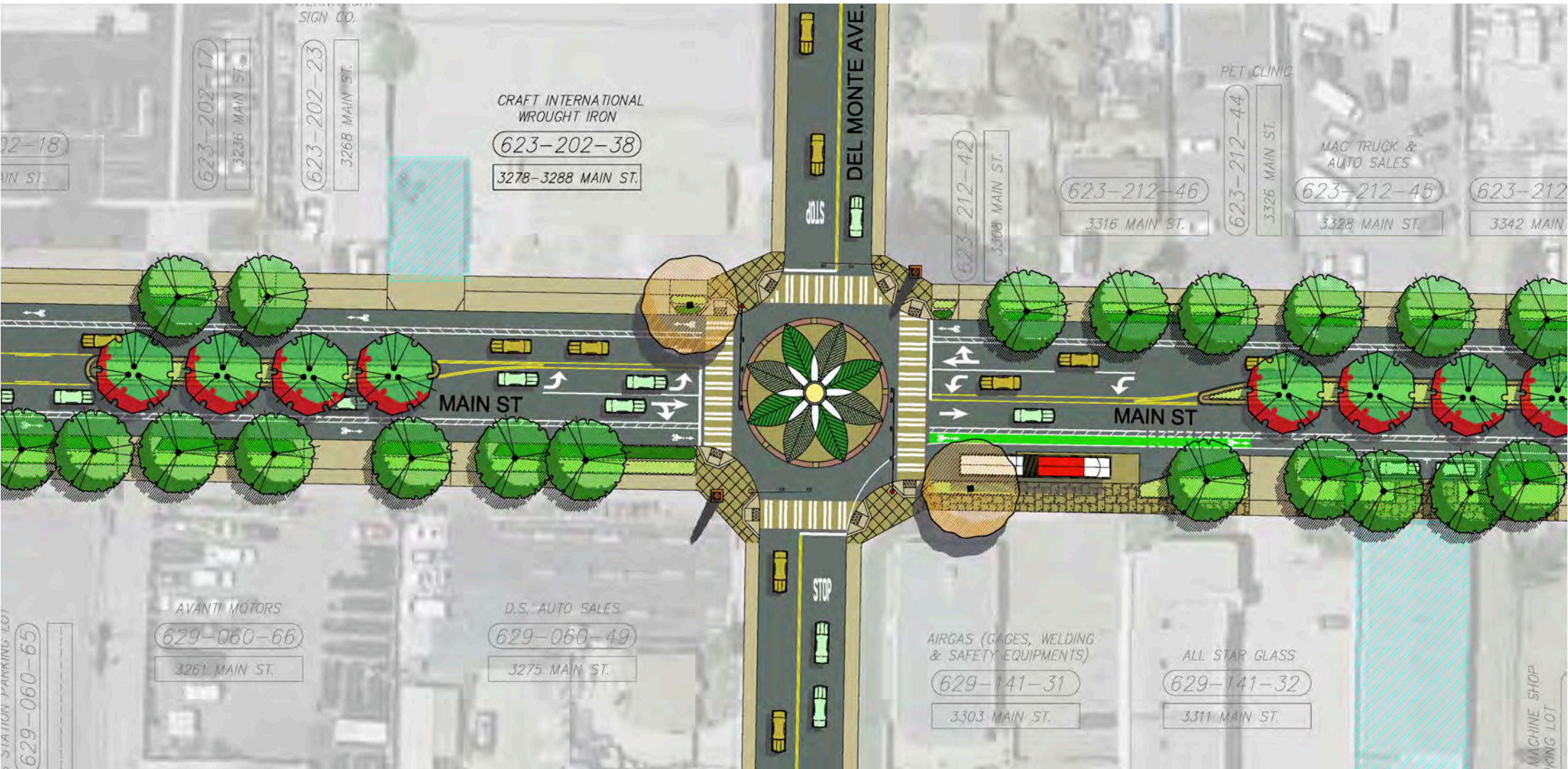












Fig. 5.14

CONCEPTUAL PLANT MATERIAL LEGEND		
DIST. MARKER TREES SUCH AS: 36" BOX SIZES		
	<i>PISTACIA chinensis</i>	Chinese Pistache
	<i>METROSIDEROS excelsa</i>	New Zealand Christmas Tree
MEDIAN TREES SUCH AS: 36" BOX SIZES		
	<i>PISTACIA chinensis</i>	Chinese Pistache
	<i>PYRUS calleryana 'Bradford'</i>	Flowering Pear
PARKWAY TREES SUCH AS: 24" BOX SIZE		
	<i>OLEA europea</i>	Olive
	<i>QUERCUS ilex</i>	Holly Oak
MEDIAN SHRUBS SUCH AS: 1 GAL. & 5 GAL. SIZES		
	<i>CAREX spp.</i>	Sedge
	<i>DIETES spp.</i>	African Iris
PARKWAY SHRUBS SUCH AS: 1 GAL. & 5 GAL. SIZES		
	<i>ELYMUS glaucus</i>	Blue Wild Rye
	<i>HELIOTRICHON sempervirens</i>	Blue Oat Grass



5.5 River District Concept











An additional theme of significance and connection is the adjacent connection to the Otay Regional Park and Otay River. The Otay Valley Regional Park represents one of the major open space areas within the southern area of San Diego County, linking south San Diego Bay with Otay, San Miguel, and the Jamul Mountains. The presence of this recreational amenity will provide Main Street residents and visitors with opportunities ranging from playing fields and picnic areas to hiking, biking, and horse trails. At the same time, the park will protect open space, wildlife, historic, agricultural, and archaeological resources.

Selected site features and components that occur at intersections (or gateways) would include styled monument columns surrounded by mini-plazas and site furnishings. The intersections would include enhanced paving with icons of river flora and fauna such as Least Terns, cobblestones, and trail way-finding information.

The parkway and median trees would consist of White Alder, London Plane tree (Sycamore’s cousin), Madrone and Western Redbud trees; shrubs would include native grasses, sedges and fortnight lilies.



Fig. 5.15

CONCEPTUAL PLANT MATERIAL LEGEND		
DIST. MARKER TREES SUCH AS: 36" BOX SIZES		
	<i>PISTACIA chinensis</i>	Chinese Pistache
	<i>METROSIDEROS excelsa</i>	New Zealand Christmas Tree
MEDIAN TREES SUCH AS: 36" BOX SIZES		
	<i>ARBUTUS 'Marina'</i>	Madrone
	<i>CERCIS occidentalis</i>	Western Redbud
PARKWAY TREES SUCH AS: 24" BOX SIZE		
	<i>ALNUS rostrifolia</i>	White Alder
	<i>PLATANUS acerifolia</i>	London Plane
MEDIAN SHRUBS SUCH AS: 1 GAL. & 5 GAL. SIZES		
	<i>AGAVE attenuata</i>	Agave
	<i>GAZANIA spp.</i>	Gazania
PARKWAY SHRUBS SUCH AS: 1 GAL. & 5 GAL. SIZES		
	<i>MUHLENBERGIA capillaris 'Regal Mist'</i>	Pink Muhly
	<i>JUNCUS spp.</i>	Rush



